REVISION HISTORY BG3R CHASSIS

MODEL

KV-XJ29N90

PART NO.: 9-872-336-01

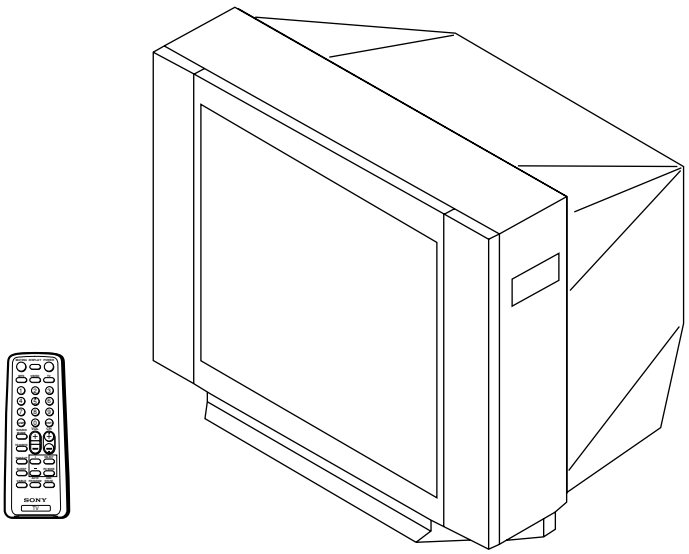
NO.	SUFFIX	DATE	SUPP / CORR	DESCRIPTION
1	-01	2002/9	--	1st. Issue

Self Diagnosis
Supported model

SERVICE MANUAL

BG3R CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-XJ29N90	RM-915	Taiwan	SCC-U54H-A				



TRINITRON® COLOR TV

SONY®

SPECIFICATIONS

			Note
Power requirements	110V AC, 60 Hz		
Power consumption (W)	Indicated on the rear of the TV		
Television system	M		
Color system	NTSC3.58, PAL*, PAL 60*, SECAM*, NTSC 4.43*		*AV IN only
Stereo/bilingual system	MTS		
Channel coverage	VHF : 2 to 13 UHF : 14 to 69 CATV: 1 to 125		
⅂⌈ (Antenna)	75-ohm external terminal		
Audio output (Speaker)	5W + 5W		
Number of terminal			
VIDEO	Input: 3* Output :1	Phono jacks; 1 Vp-p, 75 ohms	*Two input lines available
AUDIO	Input: 3* Output :1	Phono jacks; 500 m Vrms	*Two input lines available
Component Video (DVD) IN	Input: 1	Phono jacks; Y : 1 Vp-p, 75 ohms, sync negative C_B : 0.7 Vp-p, 75 ohms C_R : 0.7 Vp-p, 75 ohms Audio : 500 mVrms	
🎧 (Headphone)	Output: 1	Stereo minijack	
Picture tube	29 in.		
Tube size	724mm		Measured diagonally
Screen size	679mm		Measured diagonally
Dimension (w/h/d, mm)	794 x 573 x 517		
Mass (kg)	49		

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

Section *Title* *Page*

SELF DIAGNOSTIC FUNCTION 4

1. GENERAL 7

2. DISASSEMBLY
- 2-1. Rear Cover Removal 19
- 2-2. Speaker Removal 19
- 2-3. Chassis Assy Removal 19
- 2-4. Service Position 19
- 2-5. Replacement of Parts 19
  - 2-5-1. Replacement of Multi Button 19
  - 2-5-2. Replacement of Light Guide 19
- 2-6. J4 Board and Terminal Bracket Removal 20
- 2-7. D3 Board Removal 20
- 2-8. H5 Board Removal 20
- 2-9. A and B9 Boards Removal 20
- 2-10. Picture Tube Removal 21

3. SET-UP ADJUSTMENTS
- 3-1. Beam Landing 22
- 3-2. Convergence 23
- 3-3. Focus Adjustment 25
- 3-4. G2 (Screen) and White Balance Adjustments 25

4. CIRCUIT ADJUSTMENTS
- 4-1. Adjustment With Commander 26
- 4-2. Adjustment Method 26
- 4-3. Picture Quality Adjustments 31
- 4-4. Deflection Adjustment 31
- 4-5. H-Trapezoid Adjustment 31
- 4-6. A Board Adjustment After IC003 (Memory) Replacement 31
- 4-7. Picture Distortion Adjustment 32

5. DIAGRAMS
- 5-1. Block Diagram 33
- 5-2. Circuit Boards Location 35
- 5-3. Schematic Diagrams 36
  - (1) B9 Board Schematic Diagrams 37
  - (2) A Board Schematic Diagram 39
  - (3) C6 Board Schematic Diagram 43
  - (4) H5 Board Schematic Diagram 45
  - (5) VM1 Board Schematic Diagram 47
  - (6) D3 Board Schematic Diagram 48
  - (7) J4 Board Schematic Diagram 49
- 5-4. Voltage Measurements 50
- 5-5. Waveforms 53
- 5-6. Printed Wiring Boards and Parts Location 54
- 5-7. Semiconductors 59

6. EXPLODED VIEWS
- 6-1. Speaker Bracket 61
- 6-2. Chassis 62
- 6-3. Picture Tube 63

7. ELECTRICAL PARTS LIST 64

SELF DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER lamp will automatically begin to flash.
The number of times the lamp flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER lamp flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

1. DIAGNOSTIC TEST INDICATORS

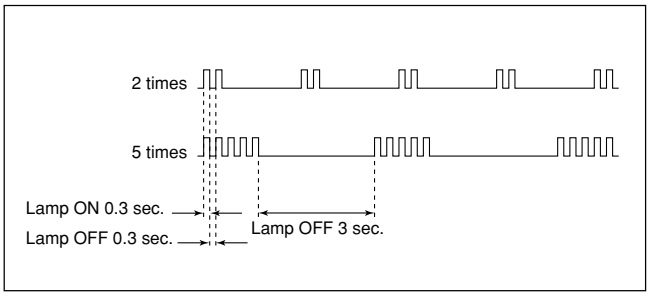
When an errors occurs, the STANDBY/TIMER lamp will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the lamp will identify the first of the problem areas.

Result for all of the following diagnostic items are displayed on screen. No error has occured if the screen displays a "0".

Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Self-diagnostic display/Diagnostic result	Probable Cause Location	Detected Symptoms
• Power does not turn on	Does not light	—	• Power cord is not plugged in. • Fuse is burned out F7601 (B9)	• Power does not come on. • No power is supplied to the TV. • AC power supply is faulty.
• +B overcurrent (OCP) or overvoltage (OVP) • Vertical deflection stopped • Horizontal deflection overdrive	2 times	002:000 or 002:001~255 003:001~255 004:001~255 at the same time	• H.OUT Q511 is shorted. (A board) • IC1800 is shorted. (C6 board) • -13V is not supplied. (A board) • IC 503 faulty (A board)	• Power does not come on. • Load on power line is shorted. • Has entered standby state after horizontal raster. • Vertical deflection pulse is stopped. • Power line is shorted or power supply is stopped.
• White balance failure (no PICTURE)	5 times	005:000 or 005:001~225	• G2 is improperly adjusted. (Note 2) • CRT problem. • Video OUT is faulty. (C6 board) • IC301 is faulty. (A board) • No connection A board to C6 board.	• No raster is generated. • CRT cathode current detection reference pulse output is small.
• Micro reset	—	101:00 or 101:001~225	• Discharge CRT (C6 Board) • Static discharge • External noise	• Power is shut down shortly, after this return back to normal. • Detect Micro latch up.

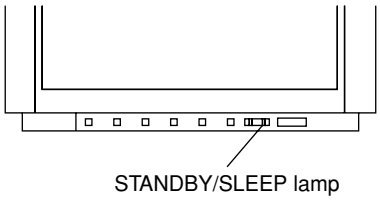
Note 1: If a + B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously.
The symptom that is diagnosed first by the microcontroller is displayed on the screen.
Note 2: Refer to screen (G2) Adjustment in section 3-4 of this manual.

2. DISPLAY OF STANDBY/TIMER LIGHT FLASH COUNT



Diagnostic Item	Flash Count*
+B overcurrent/overvoltage Vertical deflection stopped	2 times
White balance failure	5 times

* One flash count is not used for self-diagnostic.



3. STOPPING THE STANDBY/TIMER FLASH

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER lamp from flashing.

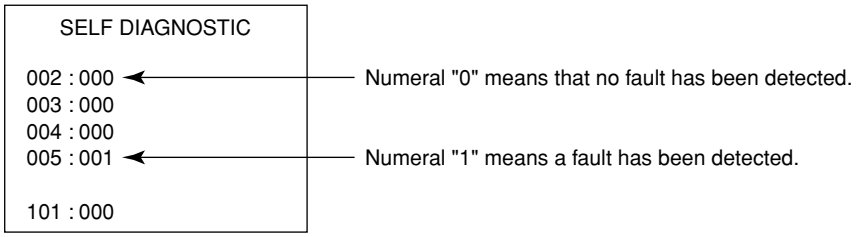
4. SELF-DIAGNOSTIC SCREEN DISPLAY

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurances of failure for confirmation on the screen:

[To Bring Up Screen Test]
In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

Screen display ➡ channel 5 ➡ Sound volume - ➡ Power ON
⇧
Note that this differs from entering the service mode (mode volume +).

Self-Diagnosis screen display


SELF DIAGNOSTIC
002 : 000
003 : 000
004 : 000
005 : 001
101 : 000
Numeral "0" means that no fault has been detected.
Numeral "1" means a fault has been detected.

5. HANDLING OF SELF-DIAGNOSTIC SCREEN DISPLAY

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to “0”.

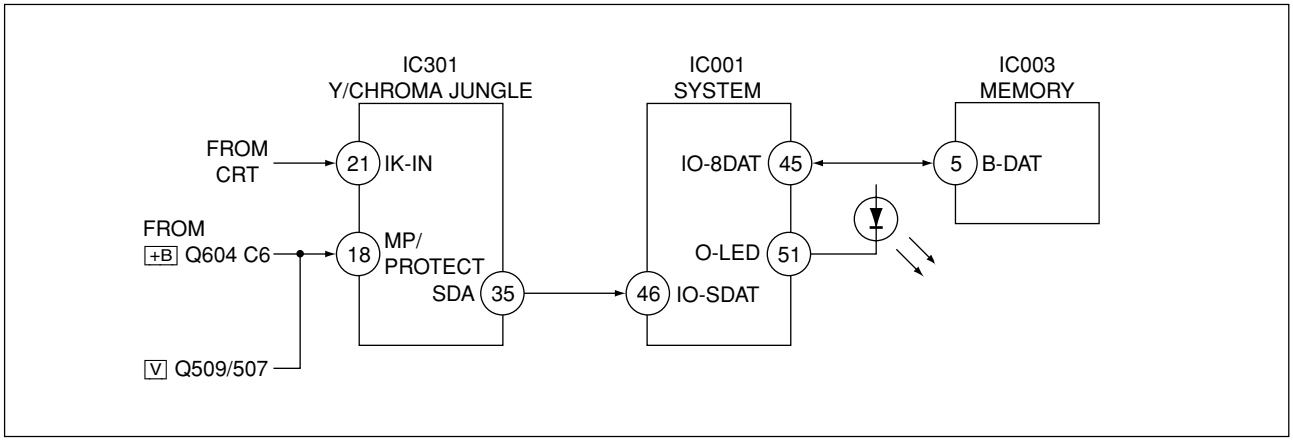
Unless the result display is cleared to “0”, the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

[Clearing the result display]
To clear the result display to “0”, press buttons on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

Channel [8] ➡ 0

[Quitting Self-diagnostic screen]
To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

6. SELF-DIAGNOSTIC CIRCUIT

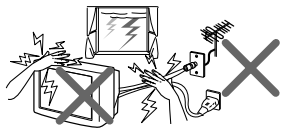


+B overcurrent (OCP)	Occurs when an overcurrent on the +B(135) line is detected by Q604. If Q604 go to ON and the voltage to pin 18 of IC301 should go down when V.SYNC is more than seven verticals in a period, the unit will automatically turn off.
Vertical deflection stopped	Occurs when an absence of the vertical deflection pulse is detected by Q509 and IC001 shut down the power supply.
Vertical deflection overcurrent	Occurs when an overcurrent on V drive line is detected by Q507. Power supply will be shut down when detect this by IC001.
White balance failure	If the RGB levels* do not balance or become low level within 5 seconds, this error will be detected by IC301. TV will stay on, but there will be no picture. * (Refers to the RGB levels of the AKB detection Ref pulse that detects IK.)

The operating instruction mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

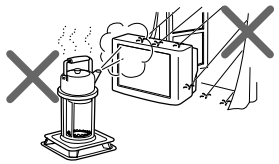
警告

- 本電視機內存在危險性高電壓。
- 本電視機僅可在110 伏特交流電壓下操作。

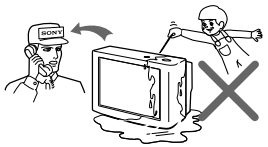


為了個人安全起見，雷雨期間，請勿觸摸電視機的任何部份、包括電源線和天線電纜。

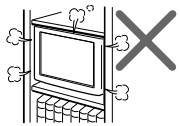
為了兒童安全起見，請勿讓他們獨自逗留在電視機旁。千萬別讓兒童攀爬本電視機。



為防止火災或觸電，請勿使本電視機被雨淋或受潮。

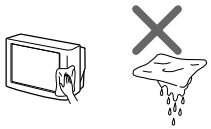


若有任何液體流入或固體落入本電視機內時，請勿操作本電視機。應立即請合格的專業人員檢查。



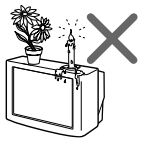
請勿堵塞本電視機的通風口。

請勿將本電視機放置於諸如書架或嵌入式壁櫥等封閉之處。

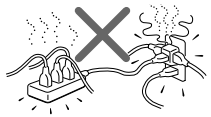


請用乾的軟布清潔本電視機。

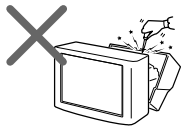
請勿使用汽油、稀釋劑或任何其它化學品清潔本電視機。請勿刮劃顯像管。



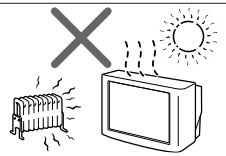
請勿放置任何物體於電視機上。



請勿在同一電源插座上插入太多的電器。請勿損壞電源線。



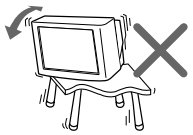
請勿打開本電視機的機殼和後蓋，因電視機內存在高電壓和危險性部件。須由合格的專業人員對電視機進行檢修或棄置。



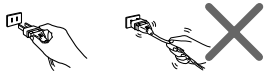
本電視機只適於家庭使用。請勿將本電視機放置於任何交通工具內或多塵、高溫、潮濕或震動頻繁之處。

SECTION 1
GENERAL

警告（續）



放置電視機於穩定的、並足以支撐電視機重量的電視支架及地面上。確保電視支架的表面平整且表面積寬於電視機底面。



捏住插頭將電源線拔開。請勿直接拉拔電源線。即使電視機已斷開電源，但只要電源線還在插座內，它仍接通至交流電源。若想移動本電視機或打算近期內不使用本電視機時，請將電源線斷開。

準備工作

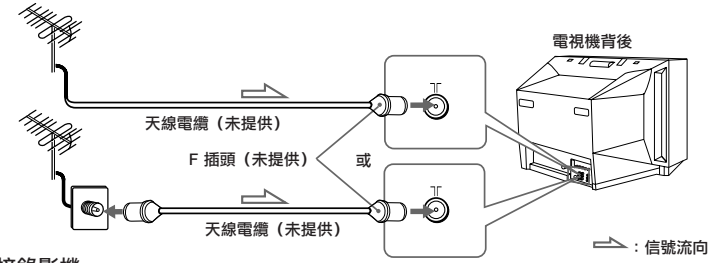
注意

- 若未完成所有連接程序，請勿接通電源：否則極少量的電流可能經天線或其它端子外泄。
- 若打算近期內不使用遙控器，請將電池取出，以避免電池泄漏而損壞遙控器。若您不小心觸及電池所泄漏的液體，應立即用水洗淨。

步驟 1

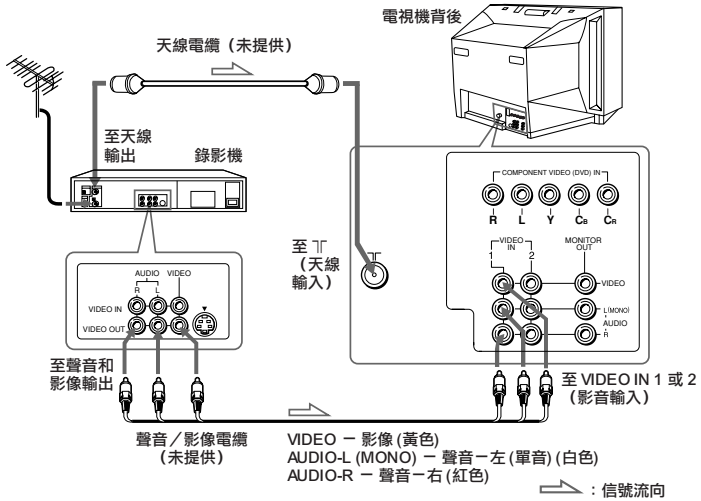
連接天線

若您想要連接錄影機，請參考以下“連接錄影機”接線圖。



連接錄影機

要觀看影音輸入時，按壓 VIDEO（影像）鍵（請參考第12 頁）。

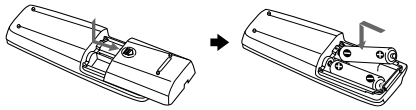


注

- 當您使用電視機背後的 VIDEO IN 1 或 2（影音輸入）插口或電視機前面的 VIDEO 2 INPUT（影音 2 輸入）插口時，您也可通過“多系統視訊入端子”接收 PAL、NTSC 和 SECAM 的影音信號。
- 若與單聲道錄影機相連接時，請將黃色插頭插至 VIDEO一影像（黃色插口），而將黑色插頭插至 AUDIO-L（MONO）一 聲音一左（單音）（白色插口）。
- 請不要把影像裝置同時連接至本電視機前面的 VIDEO 2 INPUT（影音 3 輸入）插口和背後的 VIDEO IN 2（影音輸入）插口，否則圖像將會失真。
- 當無信號輸入至已連接的影像裝置時，電視機的畫面即呈藍色。

步驟 2

將電池裝入遙控器

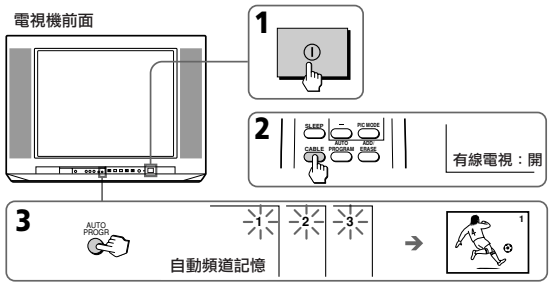


注

- 請勿使用舊電池，也不要同時使用不同類型的電池。

步驟 3

自動預設頻道



提示

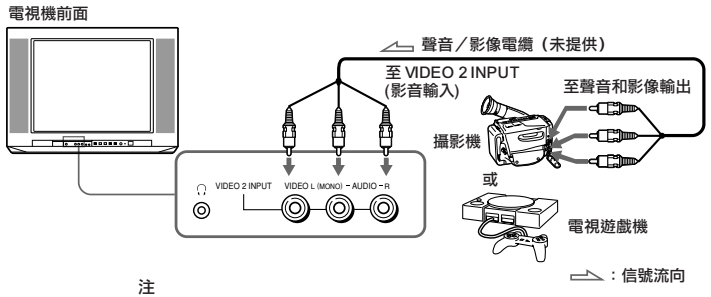
- 若您要停止自動頻道預設，請按壓 SELECT（功能選擇）鍵。
- 若您的電視已預設一個不想要的頻道或不能預設某一個頻道，您就必須手動預設該頻道（參考第10 頁）。
- 遙控器上的 AUTO PROGRAM （自動頻道記憶）鍵可當作電視機上的 AUTO PROGR（自動頻道記憶）鍵。

連接選購的裝置

本電視機可與錄影機、影碟機、攝影機、電視遊戲機或立體聲音響等選購的影像／聲音裝置相連接。

要觀看所連接裝置的影音輸入時，按壓 VIDEO（影音）鍵（請參考第 12 頁）。

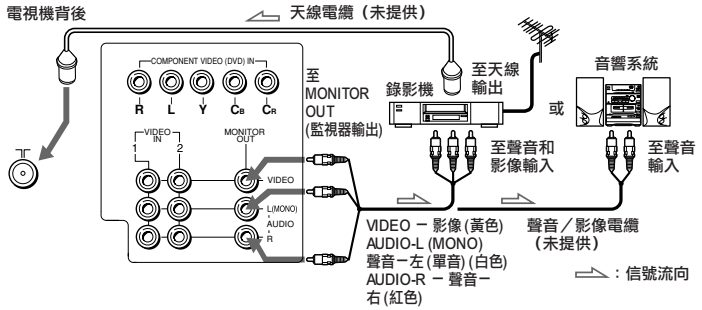
用影音 2 輸入插口與攝影機／電視遊戲機相連接



注

- 當您使用電視機背後的 VIDEO IN 1 或 2（影音輸入）插口或電視機前面的 VIDEO 2 INPUT（影音 2 輸入）插口時，您也可通過“多系統視訊入端子”接收 PAL、NTSC 和 SECAM 的 影音信號。
- 您也可將影像裝置連接至本電視機背後的 VIDEO IN 1 或 2（影音輸入）插口。
- 請不要把影像裝置同時連接至本電視機前面的 VIDEO 2 INPUT（影音 2 輸入）插口和背後的 VIDEO IN 2（影音輸入）插口，否則圖像將會失真。

用監視器輸出插口與影像／聲音裝置相連接

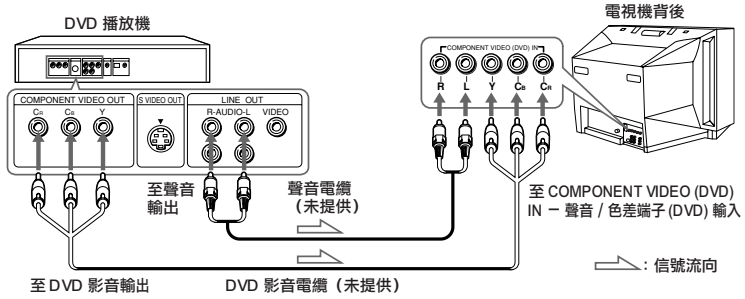


注

- 若您在電視畫面上選擇“DVD”，MONITOR OUT（監視器輸出）插口將不會輸出任何信號這並不表示發生故障。

用 COMPONENT VIDEO（DVD）IN（聲音／色差端子（DVD）輸入）插口與 DVD 播放機相連接

1. 將電視機上的 COMPONENT VIDEO（DVD）IN（聲音 / 色差端子（DVD）輸入）R（右）和 L（左）與 DVD 播放機上的 LINE OUT（線路輸出）的 AUDIO（聲音）R（右）和 L（左）輸出插口連接起來。
2. 用 DVD 影音電纜將電視機上的 COMPONENT VIDEO (DVD) IN（聲音 / 色差端子（DVD）輸入）Y，C_B 和 C_R 插口連接至 DVD 播放機上的 COMPONENT VIDEO OUT（DVD 影音輸出）Y，C_B 和 C_R 插口。



注

- 當連接 DVD 播放機至電視機上的 COMPONENT VIDEO (DVD) IN（聲音 / 色差端子（DVD）輸入）時，若您的 DVD 播放機可輸出隔行和逐行的掃描模式信號，則請選擇隔行掃描輸出。您的電視機可接收 525i/60 赫茲或 625i/50 赫茲的隔行掃描信號。
- 某些 DVD 播放機的插口可能標記不同：

连接	至（DVD 播放机上的）
Y（绿色）	Y
C_B（蓝色）	C_b，B-Y 或 P_B
C_R（红色）	C_r，R-Y 或 P_R

- 由於 DVD 碟片上的高質量屏幕包含許多信息，因此可能出現屏幕紊亂。在這種情形下，請調整“銳度”。（參考第 15 頁）。

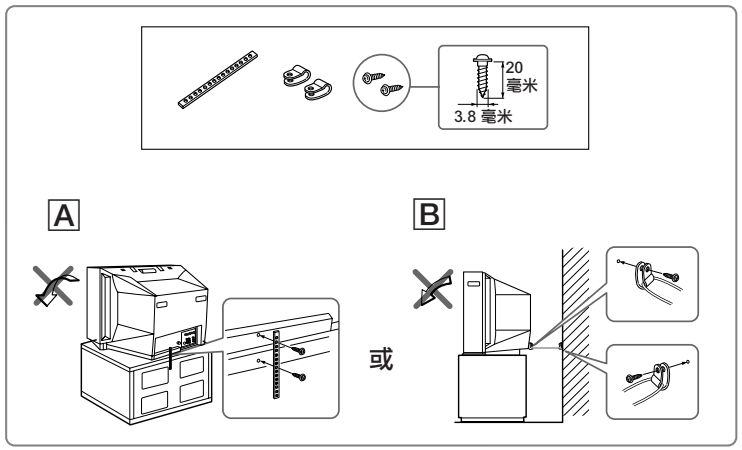
固定電視機

為防止電視機摔落，請採用下述方法之一將電視機固定。

A 將固定用的帶條，用所提供的螺釘按帶條上的孔安裝在電視機背後和其支架上。

或

B 用一根繩索或鏈條穿過夾子將電視機固定在牆上或柱子上。

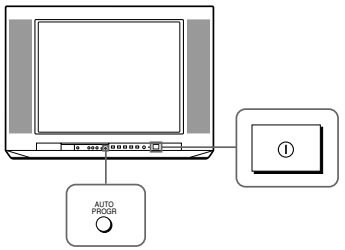


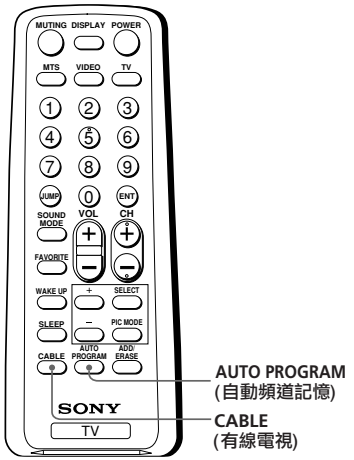
注

- 請僅使用提供的螺釘。使用其它螺釘可能會損壞本電視機。

預設頻道

您可用遙控器或電視機上的按鍵預設有線電視頻道，VHF 或 UHF 的廣播頻道。



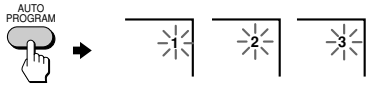


自動預設頻道

1 **按壓電視機上的 ⏻（電源）鍵以接通電視機電源。**

2 **按壓 CABLE （有線電視）鍵以選擇“有線電視：開”。**

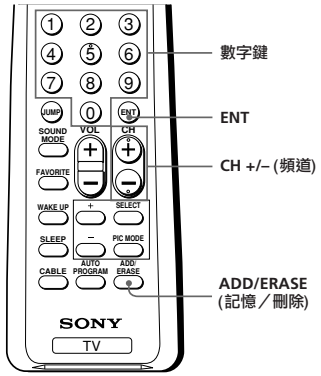
3 **按壓 AUTO PROGRAM (自動頻道記憶) 鍵。**



注

- 若您選擇“有線電視：開”，您將會接收到 125 個有線電視頻道。若沒有有線電視頻道，您將會接收到 VHF 的廣播頻道而已。
- 若您選擇“有線電視：關”，您將會接收到 68 個 VHF 或 UHF 的廣播頻道而已。

續



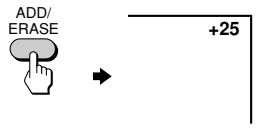
手動預設頻道

要接收某一個新的頻道或接收一個信號微弱的頻道時，請手動預設頻道。

1 **按壓數字鍵以選擇您所要的頻道號碼，然後按壓 ENT 鍵。**

2 **按壓 ADD/ERASE（記憶／刪除）鍵。**

“+”顯示於頻道號碼旁邊，這表示頻道預設已完成。



解除頻道號碼

解除了不用或不要的頻道號碼後，當按壓 CH +/–（頻道）鍵時，您就可跳躍那些頻道號碼。

1 **按壓 CH +/–（頻道）鍵直到不用或不要的頻道號碼顯示於畫面上。**

2 **按壓 ADD/ERASE（記憶／刪除）鍵。**

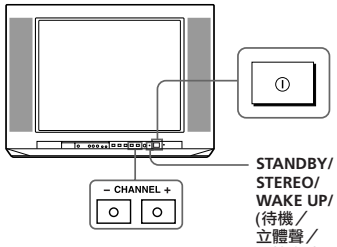
“–”顯示於頻道號碼旁邊，這表示頻道號碼已被解除。

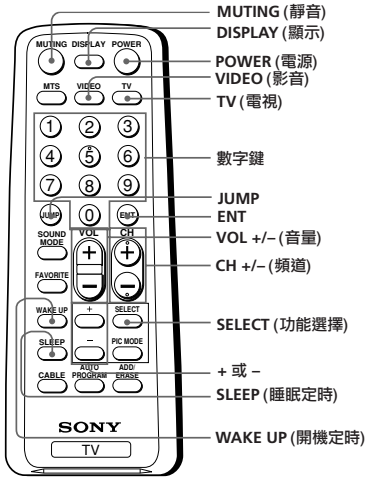
要取消跳躍頻道號碼設定時

再次預設頻道。

觀看電視

本節說明觀看電視時所使用的功能。大多數功能都可用遙控器操作。





1 **按壓電視機上的 ⏻（電源）鍵。**

當電視機處於待機狀態時（電視機上的 STANDBY（待機）指示燈已發出紅色亮光），按壓遙控器上的 POWER（電源）鍵或電視機上的 CHANNEL +/–（頻道）鍵。

2 **要選擇頻道號碼時，按壓數字鍵後再按壓 ENT 鍵，或直接按壓 CH +/–（頻道）鍵。**

3 **按壓 VOL +/–（音量）鍵以調整音量。**

續

KV-XJ29N90
RM-915

附加操作

要	操作如下
暫時切斷電視機的電源	按壓遙控器上的 POWER（電源）鍵。電視機上的 STANDBY（待機）指示燈即發出紅色亮光。
完全切斷電視機的電源	按壓電視機上的 ⏻（電源）鍵。
消除聲音	按壓 MUTING（靜音）鍵。
觀看影音輸入 （錄影機、攝影機等）	按壓 VIDEO（影音）鍵以選擇“影音輸入1”，“影音輸入2”或“DVD”。 要回到電視節目時，按壓 TV（電視）鍵即可。
更換彩色系統設定 （僅於影音輸入插口）	重復按壓 SELECT（功能選擇）鍵直到“彩色系統”顯示於畫面上，然後按壓 + 或 – 鍵以選擇適當的彩色系統直到顏色被改善至最理想的狀態。 自動切換 → PAL → SECAM → NTSC3.58 → NTSC4.43 →
跳回到之前收看的頻道號碼	按壓 JUMP 鍵。
顯示畫面上的信息*	按壓 DISPLAY（顯示）鍵。
調整電視上傾斜的畫面	重復按壓 SELECT 鍵直到“傾斜調整”顯示於畫面上，然後按壓 + 或 – 鍵以調整傾斜的圖像。 傾斜調整 當調整時，畫面上的 ⊡ 或 ⊡ 符號將開始閃爍。

* 畫面上即顯示圖像、聲音，以及頻道號碼或影音輸入的信息。畫面上的圖像和聲音信息在顯示大約三秒後即消失。

改變畫面顯示語言

1 **按壓 SELECT（功能選擇）鍵直到“語文顯示／LANGUAGE：中文”顯示於畫面上。**

2 **按壓 + 或 – 鍵以選擇“ENGLISH”。**

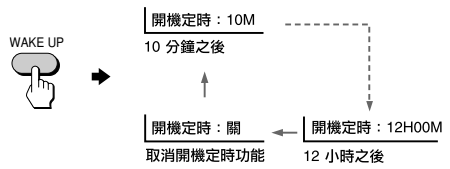
提示

- 您也可使用電視機上的 SELECT（功能選擇）鍵或 VOLUME +/–（音量）鍵來選擇畫面顯示語言。

設定開機定時器

1 **按壓 WAKE UP（開機定時）鍵直到您所指定的時間顯示於畫面上。**

一旦時間被設定，開機定時器立即啟動。



2 **請選擇當您醒來時所要觀看的頻道號碼或影音輸入。**

3 **若您要電視機自動切斷電源，請按壓遙控器上的 POWER (電源) 鍵或設定睡眠定時功能。**

電視機上的 WAKE UP（開機定時）指示燈發出橙色亮光。

要取消開機定時器時

按壓開機定時鍵直到“開機定時：關”顯示於畫面上，或切斷電視機電源。

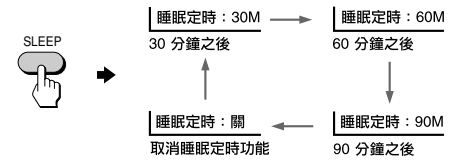
注

- 用開機定時器接通電視機電源並超過兩小時後，若您不按壓電視機或遙控器上的任何一個按鍵或控制鍵，則電視機再進入待機狀態。要繼續觀看電視時，按壓電視機或遙控器上的任何一個按鍵或控制鍵即可。

設定睡眠定時器

按壓 SLEEP（睡眠定時）鍵直到您所指定的時間顯示於畫面上。

一旦時間被設定，睡眠定時器立即啟動。



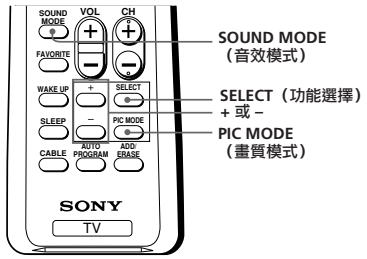
要取消睡眠定時器時

按壓睡眠定時鍵直到“睡眠定時：關”顯示於畫面上，或切斷電視機電源。

調整圖像和音響

您可選擇畫質和音效模式或調整其設定來獲得最適圖像和音響。

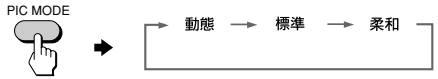
您可選擇環繞音效模式以改變音響效果。



選擇畫質和音效模式

要選擇畫質模式

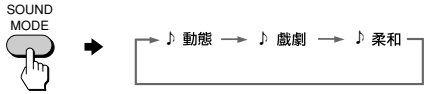
重復按壓 PIC MODE（畫質模式）鍵直到您所要的畫質模式顯示於畫面上。



選擇	以
“動態”	觀看高對比圖像。
“標準”	觀看普通對比圖像。
“柔和”	觀看柔和圖像。

要選擇音效模式

重復按壓 SOUND MODE（音效模式）鍵直到您所要的音效模式顯示於畫面上。



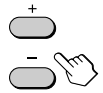
選擇	以
“♪動態”	收聽強調低和高音調的動態及清晰音響。
“♪戲劇”	收聽強調說話的聲音及背景音樂。
“♪柔和”	收聽柔和聲音。

調整圖像和聲音設定

1 **按壓 SELECT（功能選擇）鍵直到您所要調整的設定顯示於畫面上。**

每次您按壓 SELECT（功能選擇）鍵，設定項目將會如圖所示改變：

2 **按壓 + 或 – 鍵以調整所選擇的項目。**



3 **要調整其它項目時，重復第 1 和 第 2 步驟。**

* 只有當彩色系統為 NTSC 時，您才能調整“色相”設定。

注

- 當您選擇畫質和音效模式時，已被調整的設定將隨被選的模式而改變。
- 您也可使用電視機上的 SELECT（功能選擇）鍵和 VOLUME +/–（音量）鍵來調整圖像和聲音設定。

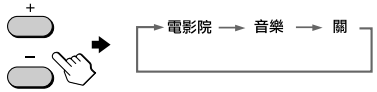
續

調整圖像和音響（續）

選擇環繞音效模式

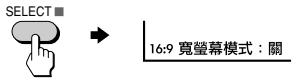
1 **重復按壓 SELECT 鍵直到“環繞音效”顯示於屏幕上。**

2 **按壓 + 或 – 鍵以選擇“所要的環繞聲”。**

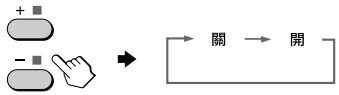


選擇 16:9 寬螢幕模式

1 **重復按壓 SELECT 鍵直到“16:9 寬螢幕模式”顯示於屏幕上。**



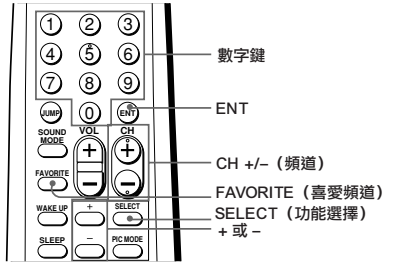
2 **按壓 + 或 – 鍵以選擇“開”。**



選擇	以
“開”	改變 16:9 寬螢幕模式信號的圖像尺寸。
“關”	取消 16:9 寬螢幕模式。

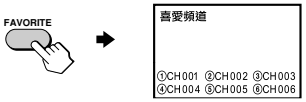
觀看喜愛頻道

您可簡易快速的在電視屏幕上顯示和選擇六個喜愛頻道。您也可輸入喜愛頻道。



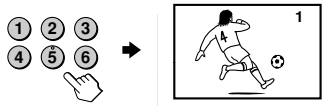
選擇喜愛頻道

1 **按壓 FAVORITE（喜愛頻道）鍵。**



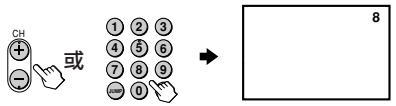
2 **按壓 1 至 6 的數字鍵以選擇您所要的喜愛頻道。**

若您第一次使用“喜愛頻道”功能，六個已被預設的喜愛頻道將顯示於屏幕上。

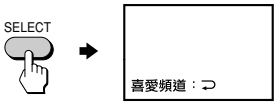


輸入喜愛頻道

1 **按壓 CH +/–（頻道）或數字鍵以選擇您所要輸入的頻道號碼（例如，頻道號碼 8）。**



2 **按壓 SELECT（功能選擇）鍵直到“喜愛頻道”顯示於屏幕上。**



3 **按壓 + 或 – 鍵以選擇您所要輸入的喜愛頻道（例如，③）。**

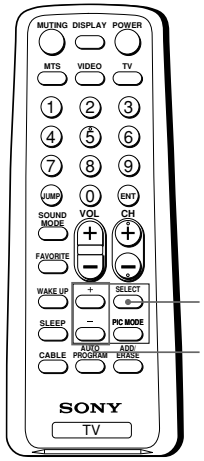
4 **按壓 SELECT（功能選擇）鍵。**

所選擇的喜愛頻道（例如，③）即呈紅色約一秒。

5 **要輸入其他喜愛頻道時，重復第 1 至第 4 步驟。**

使用“親子保護鎖定”功能

您可用遙控器上的按鍵鎖定頻道號碼以避免小孩觀看某些電視頻道。



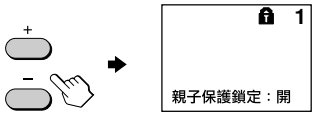
1 **選擇您所要鎖定的頻道號碼。**

2 **按壓 SELECT（功能選擇）鍵直到“親子保護鎖定”顯示於畫面上。**

3 **按壓 + 或 – 鍵以選擇“開”。**

親子保護鎖定符號（🔒）顯示於畫面上。

要取消時，按壓 + 或 – 鍵以選擇“關”。親子保護鎖定符號（🔒）將消失於畫面上。

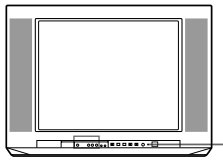


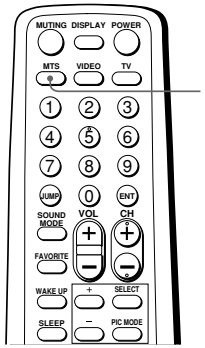
注

- 若您自動預設任何一個鎖定頻道號碼，此頻道號碼將自動解鎖。

欣賞立體聲或雙語言節目

您可欣賞音聲多重的立體聲音響或雙語言節目。

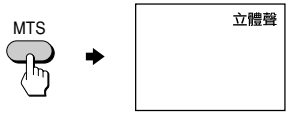




重復按壓 MTS（音聲多重）鍵至接收到您想收聽的聲音。

畫面顯示會變化以顯示所選擇的聲音。

當接收到任何立體聲節目時，電視機上的 STEREO（立體聲）指示燈發出紅色亮光。



當接收到 MTS 立體聲節目時

播送	畫面顯示（所選擇的聲音）
MTS 立體聲	立體聲 → 副語音 → 單聲道 →

選擇	以
立體聲	收聽立體聲。
副語音	收聽雙語言節目。
單聲道	接收單聲道的聲音。

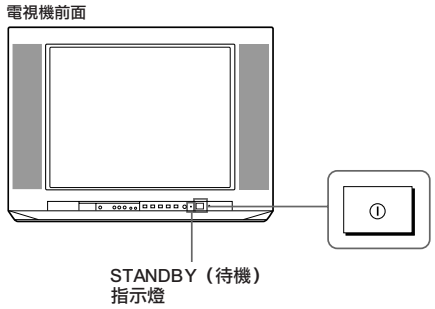
注

- 當選擇“副語音”時，非副語音節目的聲音將會與立體聲相似。
- 當信號微弱時，“副語音”或“立體聲”的聲音可能會不正常。要改善聲音，選擇“單聲道”。

KV-XJ29N90
RM-915

自動檢測判斷功能

您的電視機設有自動檢測判斷功能。如果您的電視機發生任何故障，STANDBY（待機）指示燈將會發出紅色亮光。STANDBY（待機）指示燈所發出的亮光次數將表明可能存在的原因。



1 檢查 STANDBY (待機) 指示燈所發出的紅色亮光是否相隔三秒。

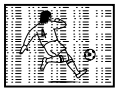
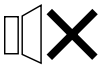
2 計算 STANDBY (待機) 指示燈的亮光次數。

3 按壓 ① (電源) 鍵以切斷電視機的電源。

4 通知您鄰近的 Sony 經銷商有關於 STANDBY (待機) 指示燈所發出的亮光次數。確定您將電視機背後所注明的機型和機身號記錄下來。

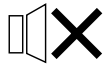
故障檢修

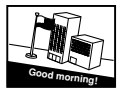
若在觀看電視時面對任何問題，請參考下列故障檢修指南。若問題仍然存在，請聯絡 Sony 經銷商。

癥狀	可能因素	解決方法	頁面
圖像有雪花狀斑點  有噪聲 	•連接已鬆脫或電纜已損壞。	•檢查天線電纜以及電視機，錄影機和牆上的天線連接是否正確。	4
	•頻道預設不適當或不完整。	•再次預設頻道。	10
	•天線類型不合適。	•檢查天線類型（VHF/UHF）。請尋求Sony 經銷商的協助。	—
	•天線定位方向不正確。	•調整天線方向。請尋求 Sony 經銷商的協助。	—
	•傳送信號微弱。	•嘗試使用信號增強器。	—
圖像失真 有噪聲 	•廣播信號太強。	•切斷信號增強器的電源或拔掉其插頭。	—
圖像良好 有噪聲 	•頻道預設不適當或不完整。	•若所有的頻道聲音都吵雜，按壓 AUTO PROGRAM（自動頻道記憶）鍵以再次預設頻道。	9
沒有圖像 沒有聲音 	•電源線，天線或錄影機沒有被連接。	•檢查電源線，天線和錄影機之連接是否正確。	4
	•電視機電源沒有被接通。	•按壓遙控器上的 POWER（電源）鍵。 •按壓電視機上的 ①（電源）鍵以切斷電視機的電源，五秒左右後再次接通電源。	12 11

續

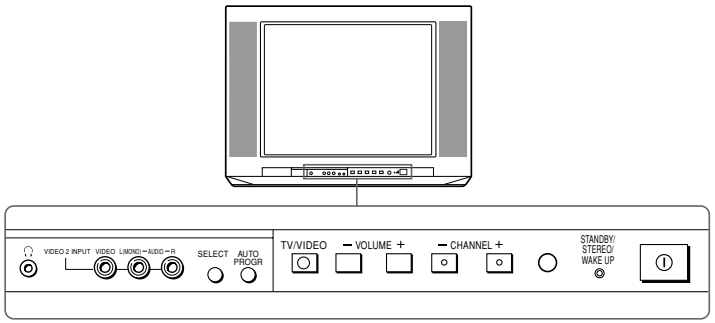
故障檢修（續）

癥狀	可能因素	解決方法	頁面
圖像良好 **沒有聲音** 	•音量水平太低。	•按壓 VOL +（音量）鍵以提高音量水平。	11
	•聲音被消除。	•按壓 MUTING（靜音）鍵以取消消音。	12
	•廣播信號有傳送故障。	•按壓 MTS（音聲多重）鍵直到聲音正常為止。	19
圖像有點線或條紋 	•受周圍環境（如汽車、霓虹燈、吹風機、發電機等）影響。	•不要在電視機旁使用吹風機或其它電器。 •調整天線方向以減低干擾。請尋求 Sony 經銷商的協助。	— —
圖像出現雙重影像或“鬼影” 	•廣播信號受周圍高山或大廈干擾。	•使用高定向天線。	—
	•天線定位方向不正確。	•調整天線方向。請尋求 Sony 經銷商的協助。	—
	•信號增強器使用不適當。	•切斷信號增強器的電源或拔掉其插頭。	—
圖像無彩色 	•彩色水平設定太低。	•按壓 SELECT（功能選擇）鍵直到“彩色”顯示於畫面上，然後按壓 + 或 – 鍵以調整顏色濃度。	15
	•天線定位方向不正確。	•調整天線方向。請尋求 Sony 經銷商的協助。	—
圖像出現反常彩色斑點 	•受外部揚聲器或其它電器電磁性的影響，或受地球磁場方向的影響。	•將電視機放置在離外部揚聲器或其它電器較遠的地方。請別移動已被接通電源的電視機。按壓電視機上的 ⏻（電源）鍵以切斷電視機電源。約15分鐘後，再接通電視機電源。	—
電視機無法接收立體聲廣播信號	•立體聲接收設定不適當。	•按壓 MTS（音聲多重）鍵直到聲音正常為止。	19

癥狀	可能因素	解決方法	頁面
立體聲廣播聲音開關失常或聲音失真。 **或** **立體聲和單聲道之間的聲音頻繁切換。**	•連接已鬆脫或電纜已損壞。	•檢查天線電纜以及電視機，錄影機和牆上的天線連接是否正確。	4
	•天線定位方向不正確。	•調整天線方向。請尋求 Sony 經銷商的協助。	—
	•廣播信號有傳送故障。	•按壓 MTS（音聲多重）鍵直到聲音正常為止。	19
圖像傾斜 	•受外部揚聲器或其它電器電磁性的影響，或受地球磁場方向的影響。	•將電視機放在離外部揚聲器或其它電器較遠的地方。 •按壓 SELECT 鍵直到“傾斜調整”顯示於屏幕上，然後按壓 + 或 – 鍵以使圖像位置調至最佳。	— 12
電視機上的 STANDBY (待機) 指示燈每隔三秒閃爍至少一次的紅色亮光。	•您的電視機可能需要修理。	•請尋求 Sony 經銷商的協助。	20
電視機外殼吱嘎聲。	•室溫的變化有時會導致電視機的外殼膨脹或縮小，因而產生噪聲。這並不表示發生故障。	—	—
當您接通電視機時聽到“嘣”的聲音。	•電視機自動消磁。這並不表示發生故障。	—	—

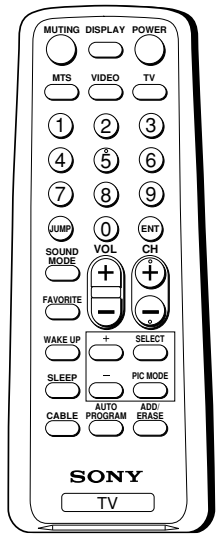
控制鍵總概況

電視機前面的控制板



按鍵	功能	頁面
AUTO PROGR（自動頻道記憶）	自動預設頻道。	5
CHANNEL +/–（頻道）	選擇頻道號碼。	11
⏻（電源）	接通或完全切斷電視機電源。	11
VOLUME +/–（音量）	調整音量。	11
STANDBY（待機）	待機指示燈。	11
TV/VIDEO（電視／影音）	選擇電視或影音輸入。	12
SELECT（功能選擇）	選擇所要的項目。	12
WAKE UP（開機定時）	開機定時指示燈。	13
STEREO（立體聲）	立體聲指示燈。	19
🎧	耳機插孔。	—

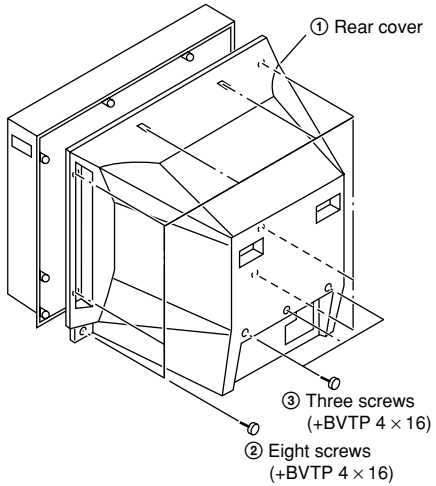
遙控器



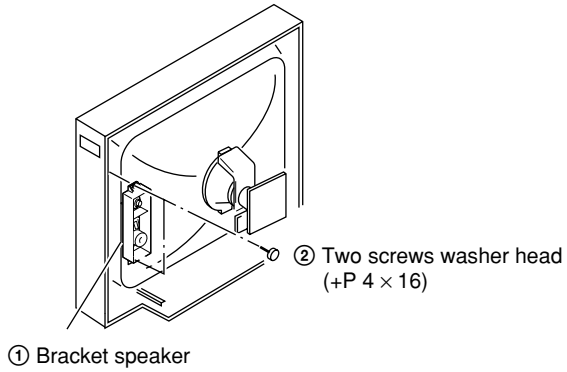
按鍵	功能	頁面
CABLE (有線電視)	收看有線電視節目。	5
POWER (電源)	接通或暫時切斷電視機電源。	11
AUTO PROGRAM (自動頻道記憶)	自動預設頻道。	9
CH +/– (頻道)	選擇頻道號碼。	10
ADD/ERASE (記憶／刪除)	手動預設頻道。	10
0 – 9	輸入號碼。	11
ENT	確認所輸入的號碼。	11
VOL +/– (音量)	調整音量。	11
MUTING (靜音)	消除聲音。	12
TV (電視)	顯示電視節目。	12
VIDEO (影音)	選擇電視或影音輸入。	12
JUMP	跳回到之前收看的頻道號碼。	12
DISPLAY (顯示)	顯示畫面上的信息。	12
SELECT (功能選擇)	選擇所要的項目。	12
+/–	調整所選的項目。	12
定時器設定		
WAKE UP (開機定時)	設定電視自動打開。	13
SLEEP (睡眠定時)	設定電視自動關閉。	13
PIC MODE (畫質模式)	選擇畫質模式。	14
SOUND MODE (音效模式)	選擇音效模式。	14
FAVORITE (喜愛頻道)	顯示喜愛頻道。	17
立體聲或雙語言操作		
MTS (音聲多重)	選擇立體聲或雙語言模式。	19

SECTION 2
DISASSEMBLY

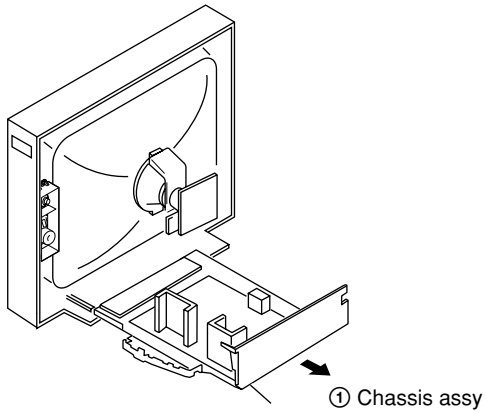
2-1. REAR COVER REMOVAL



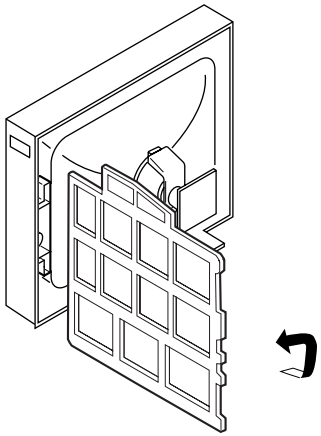
2-2. SPEAKER REMOVAL



2-3. CHASSIS ASSY REMOVAL



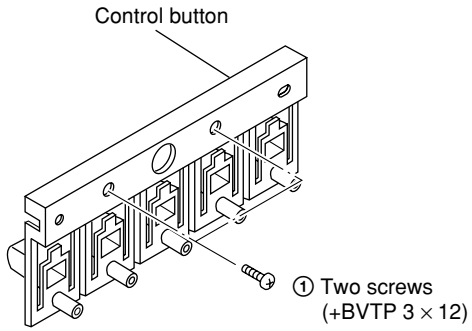
2-4. SERVICE POSITION



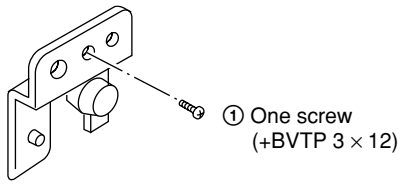
2-5. REPLACEMENT OF PARTS

For replacement of the Multi Button and Light Guide, unscrew them, exchange with the new parts, and fix them with screws (+BVTP) respectively.

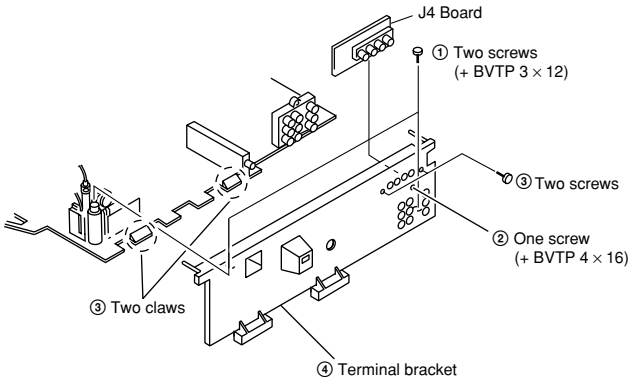
2-5-1. REPLACEMENT OF MULTI BUTTON



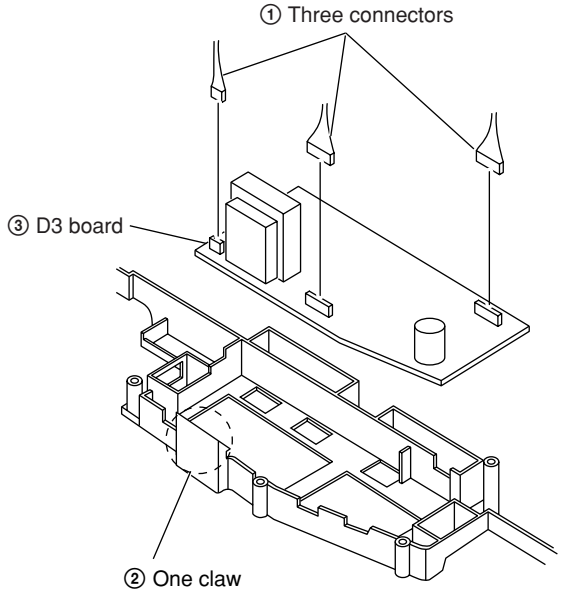
2-5-2. REPLACEMENT OF LIGHT GUIDE



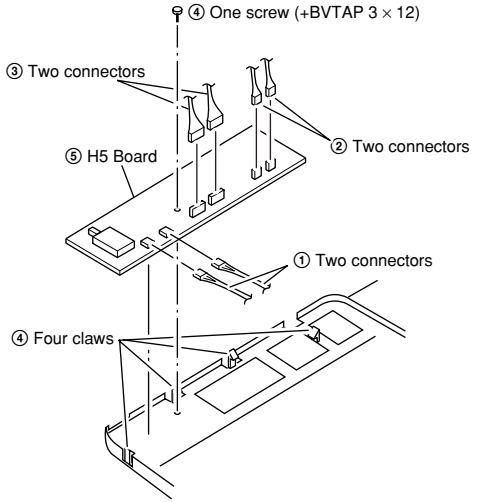
2-6. J4 BOARD AND TERMINAL BRACKET REMOVAL



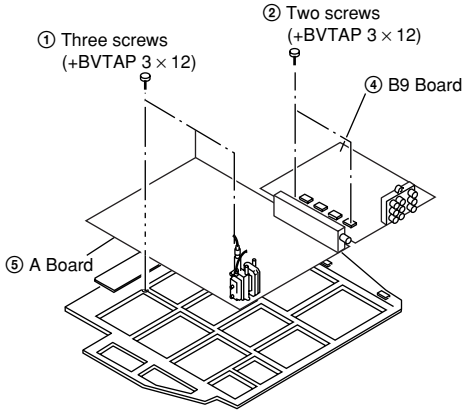
2-7. D3 BOARD REMOVAL



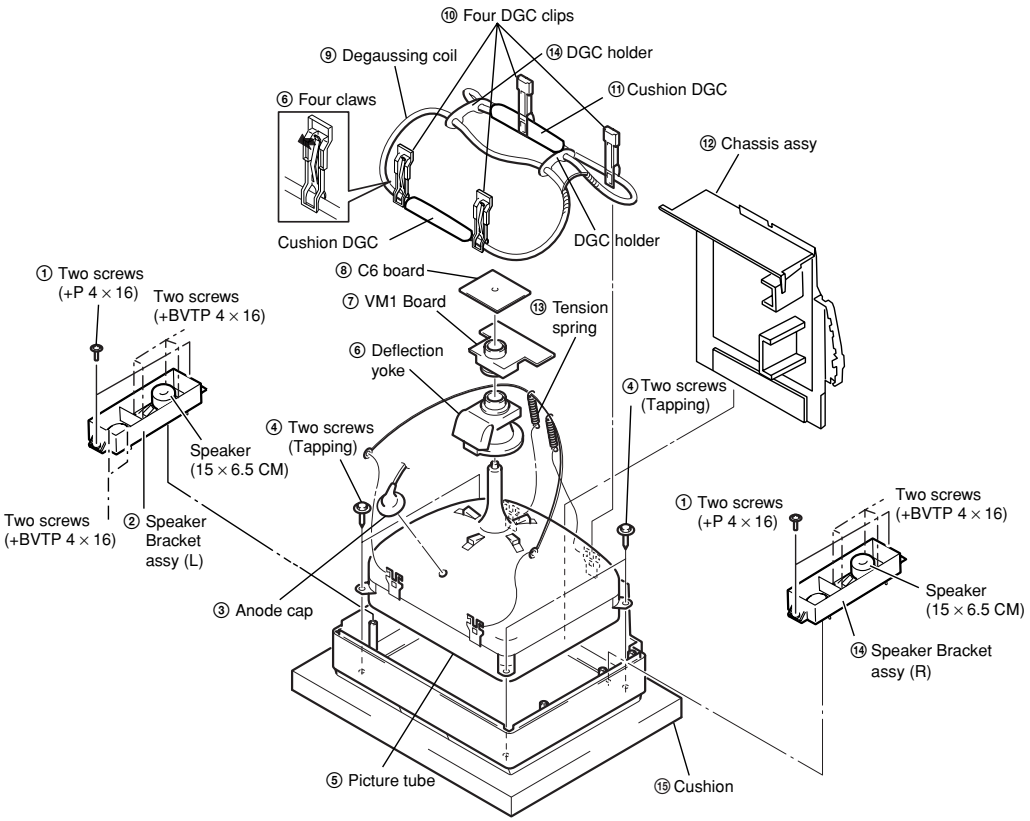
2-8. H5 BOARD REMOVAL



2-9. A AND B9 BOARDS REMOVAL



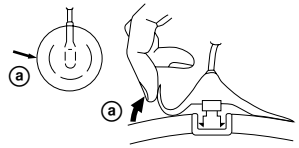
2-10. PICTURE TUBE REMOVAL


⑩ Four DGC clips
⑨ Degaussing coil
⑭ DGC holder
⑪ Cushion DGC
⑥ Four claws
⑫ Chassis assy
Cushion DGC
DGC holder
⑧ C6 board
⑦ VM1 Board
⑬ Tension spring
⑥ Deflection yoke
① Two screws (+P 4 × 16)
Two screws (+BVTP 4 × 16)
④ Two screws (Tapping)
④ Two screws (Tapping)
Speaker (15 × 6.5 CM)
Two screws (+BVTP 4 × 16)
② Speaker Bracket assy (L)
③ Anode cap
① Two screws (+P 4 × 16)
Two screws (+BVTP 4 × 16)
Speaker (15 × 6.5 CM)
⑭ Speaker Bracket assy (R)
⑤ Picture tube
⑮ Cushion

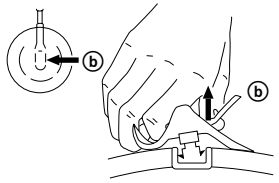
• REMOVAL OF ANODE-CAP

NOTE : After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

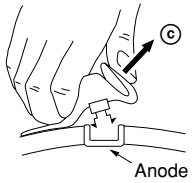
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



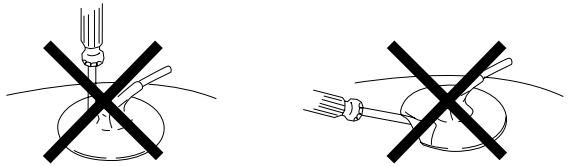
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ.

• HOW TO HANDLE AN ANODE-CAP

① Do not damage the surface of anode-caps with sharp shaped objects.
② Do not press the rubber too hard so as not to damage the inside of anode-cap. A metal fitting called the shatter-hook terminal is built into the rubber.
③ Do not turn the foot of rubber over too hard. The shatter-hook terminal will stick out or damage the rubber.



SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switches should be set as follows unless otherwise noted:

PICTURE control ..... normal
BRIGHTNESS control ..... normal

Perform the adjustments in the following order :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

Preparation :

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input a white signal with the pattern generator.
   Contrast } normal
   Brightness }
2. Position neck assy as shown in Fig3-2.
3. Set the pattern generator raster signal to a green raster.
4. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side. (See Figures 3-1 through 3-4.)
5. Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 3-2.)
6. Switch the raster signal to blue, then to red and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws and DY spacers.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Figure 3-5.)

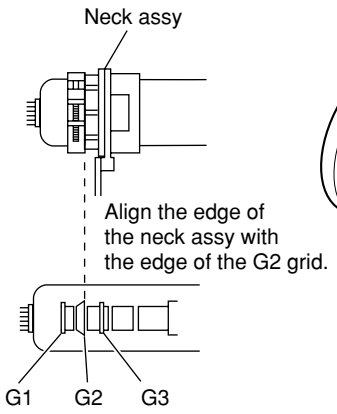


Fig. 3-1

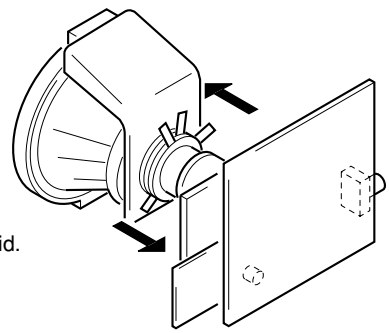


Fig. 3-2

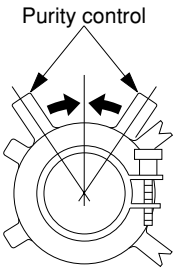


Fig. 3-3

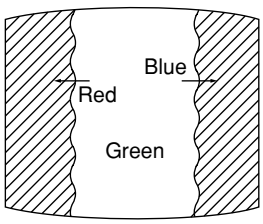


Fig. 3-4

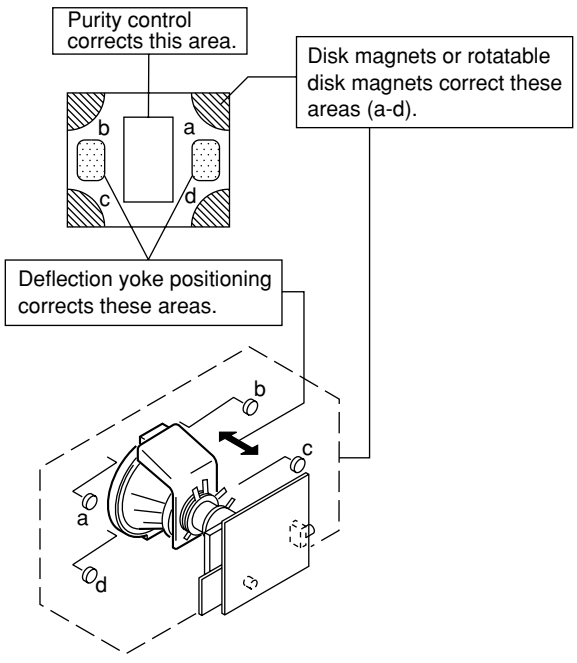


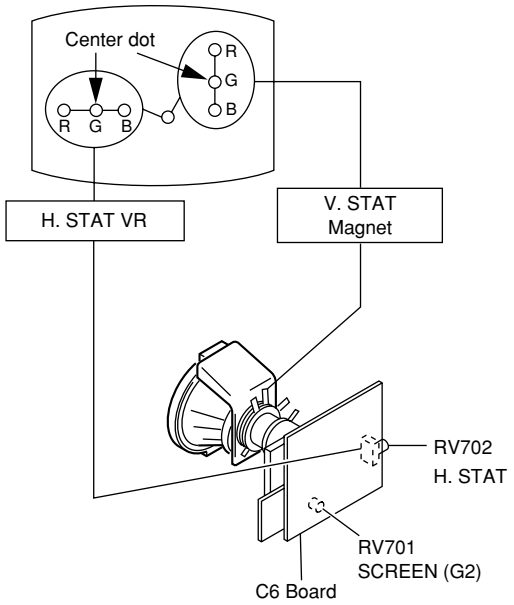
Fig. 3-5

3-2. CONVERGENCE

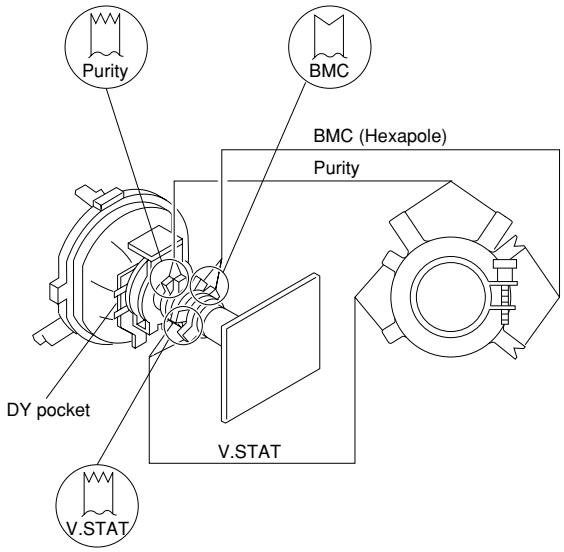
Preparation :

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Receive dot/hatch signal.
- Pic mode: Personal (Pic 90%, Brightness 50%, Col 50%, Hue 50%, Shp 50%)

(1) Horizontal and Vertical Static Convergence

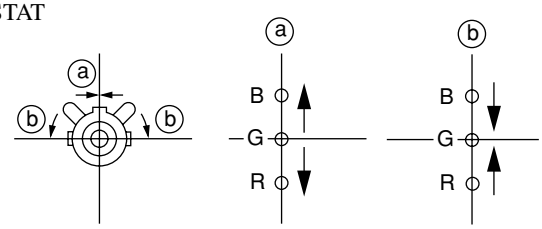


1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green and blue dots together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other, so be sure to perform adjustments while tracking.)

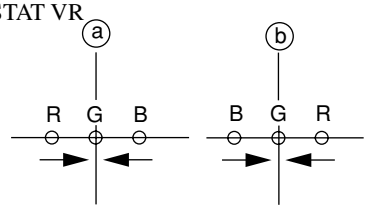


- Operation of V.STAT magnet

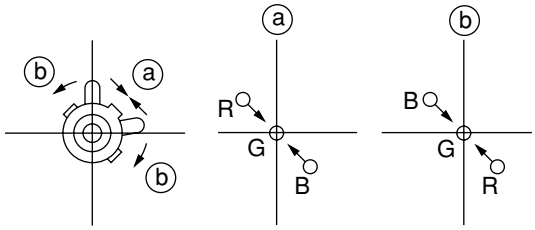
① V. STAT



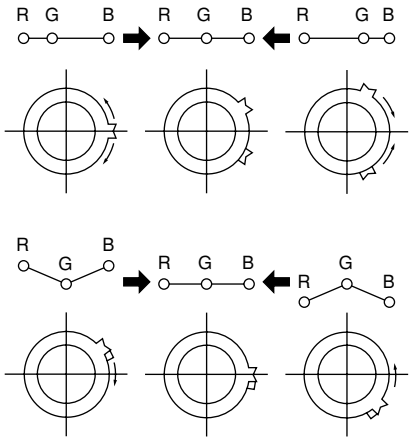
② H. STAT VR



③



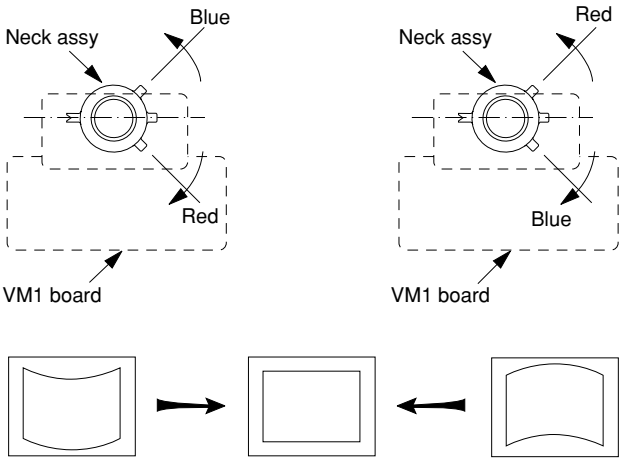
④ BMC (Hexapole) Magnet.
If the red, green and blue dots are not balanced or aligned, then use the BMC magnet to adjust in the manner described below.



⑤ Y separation axis correction magnet adjustment.

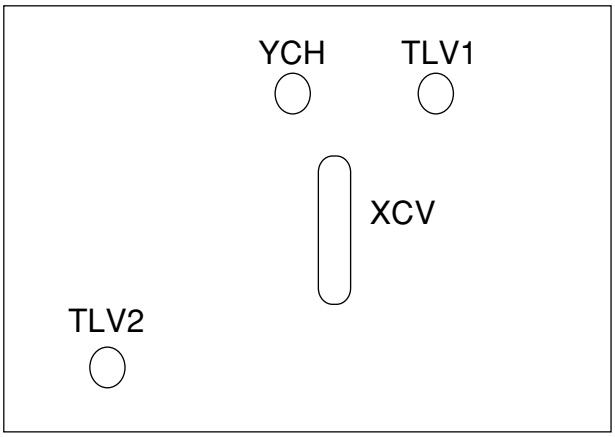
1. Receive the cross-hatch signal and adjust [PICTURE] to [MIN] and [BRIGHTNESS] to [STANDARD] .

2. Adjust the Y separation axis correction magnet on the neck assembly so that the horizontal lines at the top and bottom of the screen are straight.



TLV	Rotate	TLV-2	VOL (29”, 34”) on DY
XCV	Rotate	XCV	Adj core on DY
YCH	Rotate	YCH	VOL on DY
TLH	Insert	TLH	Correction Plate to DY Pocket (Left or Right)

ON DY:



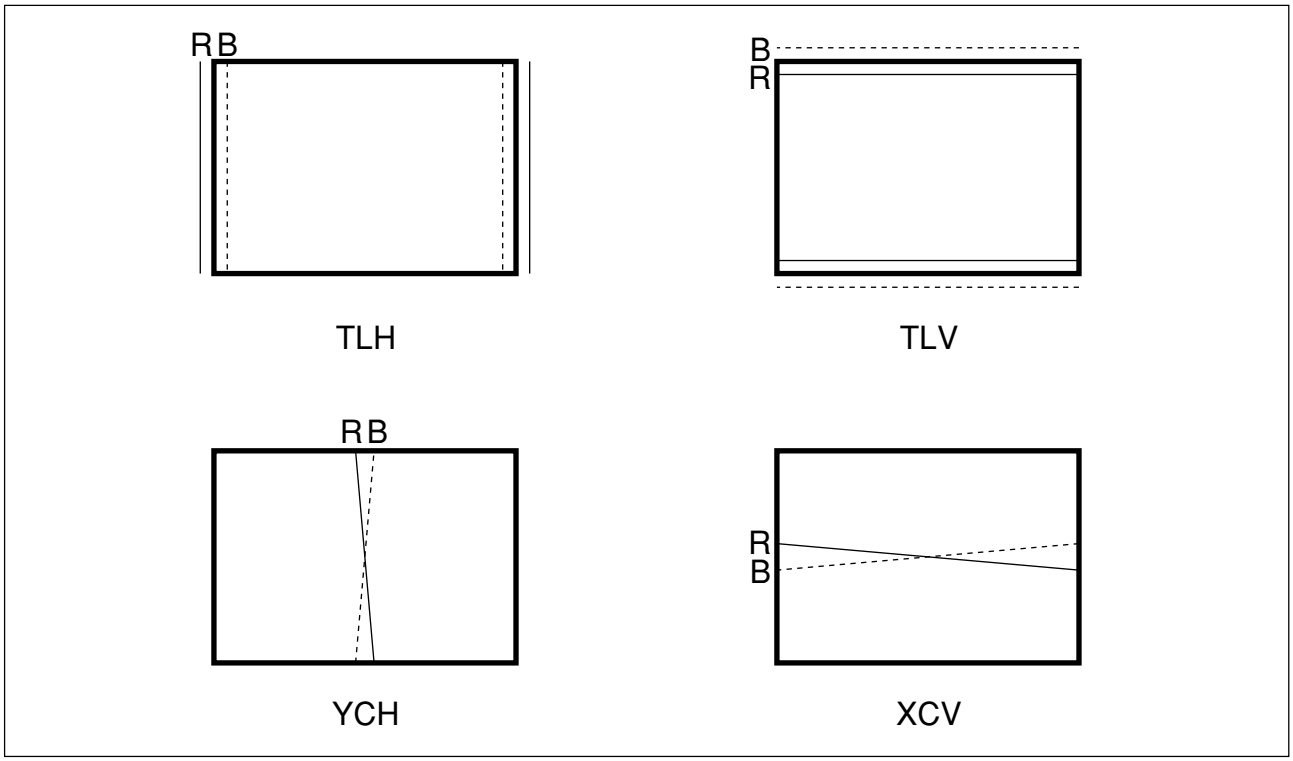
Note

1. The Red and Blue magnets should be equally far from the horizontal center line.
2. Do not separate the Red and Blue magnets too far. (Less than 8 mm)

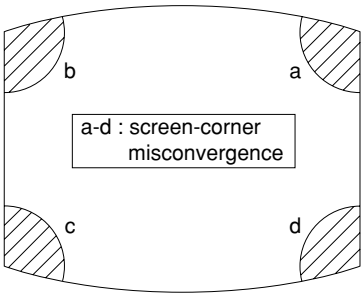
(2) Dynamic Convergence Adjustment

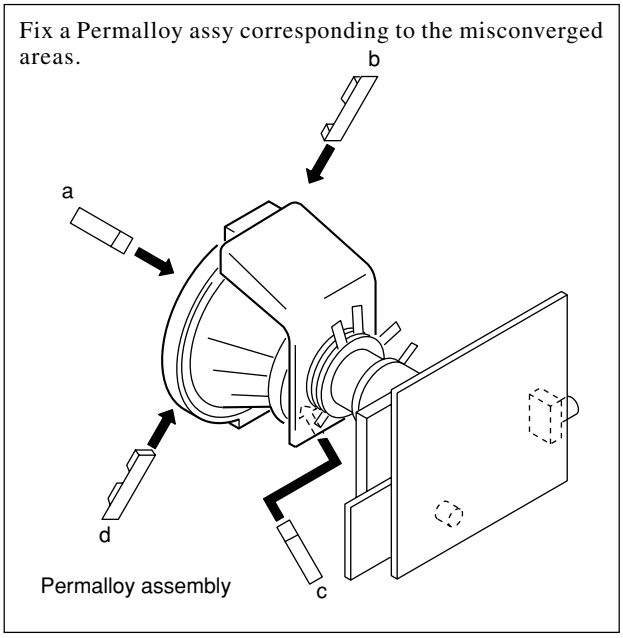
Preparation:

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence



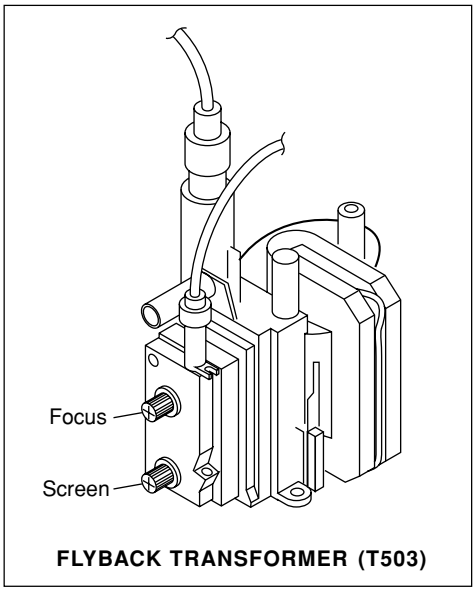
(3) Screen-corner Convergence





3-3. FOCUS ADJUSTMENT

Focus adjustment should be completed before W/B adjustment.



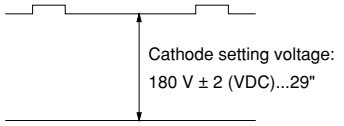
FOCUS ADJUSTMENT

1) Receive digital monoscope pattern.
2) Set "AV CONTROL" to "DYNAMIC"
3) a) Adjust FOCUS VR so that center of the screen becomes just focus.
4) Change the receiving signal to white pattern and blue back.
5) Confirm MAGENTA RING is not noticeable,
   Incase magenta is very obvious, adjust a FOCUS VR to take balance between MAGENTA RING and FOCUS.

3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT

1) Set the PICTURE to normal.
2) Put to VIDEO input mode without signals.
3) Connect R, G and B of the C6 board cathode to the oscilloscope.
4) Adjust BRIGHTNESS to obtain the cathode voltage to the value below.
5) Adjust G2 (screen) on the FBT until picture shows the point before cut off.

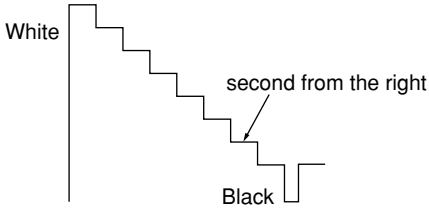


2. WHITE BALANCE ADJUSTMENT

1) Set to Service Mode (Refer Section 4-1: ADJUSTMENTS WITH COMMANDER).
2) Input white raster signal.
3) Set the PICTURE to minimum.
4) Select GCT (WHB 04) and BCT (WHB 05) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
5) Set the PICTURE to maximum.
6) Select GDR (WHB 01) and BDR (WHB 02) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
7) Write into the memory by pressing [MUTING] then [0].

3. SUB BRIGHT ADJUSTMENT

1) Set to service mode.
2) Input a staircase signal of black to white from the pattern generator.
3) BRIGHTNESS .... 50%.
   PICTURE ..... MINIMUM
4) Select SBR (WHB 07) with [1] and [4], and adjust SBR (WHB 07) level with [3] and [6] so that the second stripe from the right is dimly lit.



SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ADJUSTMENTS WITH COMMANDER

Service adjustments to this model can be performed using the supplied Remote Commander RM-915.

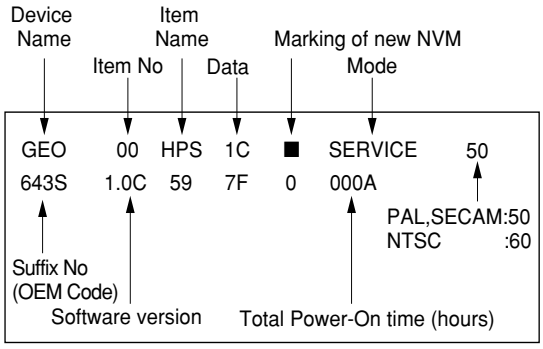
a. ENTERING SERVICE MODE

With the unit on standby

→ [DISPLAY] → [5] → [VOL (+)] → [POWER]

This operation sequence puts the unit into service mode.

The screen display is :



b. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press [POWER] button on the commander), then press [POWER] button again, hereupon it becomes TV mode.

c. METHOD OF WRITE INTO MEMORY

1) Set to Service Mode.
2) Press [1] (UP) and [4] (DOWN), to select the adjustment.
4) Press [MUTING] button to indicate WRITE on the screen.
5) Press [0] button to write into memory.

d. MEMORY WRITE CONFIRMATION METHOD

1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again to confirm adjustments were made.

[1], [4]	Select the adjustment item.
↓	
[3], [6]	Raise/lower the data value.
↓	
[MUTING]	Writes.
↓	
[0]	Executes the writing.

[7], [0]	All the data becomes the values in memory.
[8], [0]	All user control goes to the standard state.
[5], [0]	Service data initialization (Be sure not to use usually.)
[MUTING] + [0]	Write 50Hz adjustment data to 60Hz, or vice versa.
[2], [0]	Copy the data.

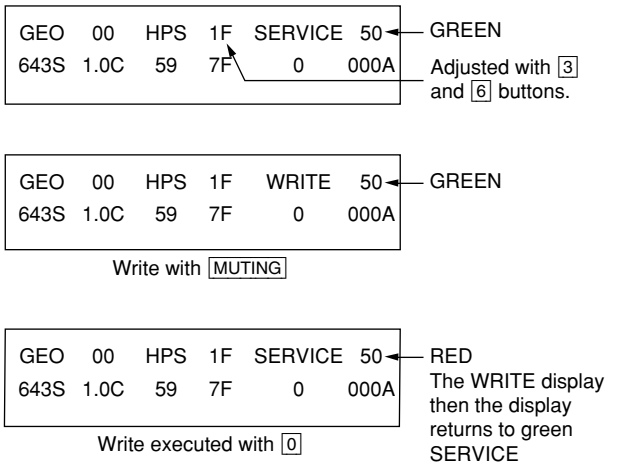
4-2. ADJUSTMENT METHOD

Item Number 00 of device GEO

This explanation uses H-Position as an example.

1. Select "GEO 00 HPS" with the [1] and [4] buttons.
2. Raise/lower the data with the [3] and [6] buttons.
3. Select the optimum state. (The standard is 1F for PAL reception.)
4. Write with the [MUTING] button. (The display changes to WRITE.)
5. Execute the writing with the [0] button. (The WRITE display will be changed to red color while excuting, and back to SERVICE.)

Example on screen display :-


GEO 00 HPS 1F SERVICE 50
643S 1.0C 59 7F 0 000A
GREEN
Adjusted with [3] and [6] buttons.
GEO 00 HPS 1F WRITE 50
643S 1.0C 59 7F 0 000A
GREEN
Write with [MUTING]
GEO 00 HPS 1F SERVICE 50
643S 1.0C 59 7F 0 000A
RED
The WRITE display then the display returns to green SERVICE
Write executed with [0]

Use the same method for all Items. Use [1] and [4] to select the adjustment item, use [3] and [6] to adjust, write with [MUTING], then execute the write with [0].

Note : 1. In [WRITE], the data for all items are written into memory together.
2. For adjustment items that have different standard data between 50Hz or 60Hz, be sure to use the respective input signal after adjustment.

Adjustment Item Table

TVG	Functionality		Initial	Range	Function	Table & Note	NVM Address		
Category	No.	Name					Slave	Sub	Bit
GEO	00	HPS	7	3F	H Position	Normal (50/60)/Wide (50/60)	A0/A4	(A1/AE)/(24/2F)	7-2
	01	HSZ	1F	3F	H Size	Normal (50/60)/Wide (50/60)	A0/A4	(A0/AD)/(23/2E)	7-2
	02	PAP	1F	3F	Pin Amp	Normal (50/60)/Wide (50/60)	A0/A4	(A2/AF)/(25/30)	7-2
	03	TLT	7	0F	Trapezium	Normal (50/60)/Wide (50/60)	A0/A4	(A4/B1)/(27/32)	7-4
	04	VPS	1F	3F	V Position	Normal (50/60)/Wide (50/60)	A0/A4	(9E/AB)/(21/2C)	7-2
	05	VSZ	1F	3F	V size	Normal (50/60)/Wide (50/60)	A0/A4	(9D/AA)/(20/2B)	7-2
	06	SCO	7	0F	S Correction	Normal (50/60)/Wide (50/60)	A0/A4	(9F/AC)/(22/2D)	7-4
	07	VLN	7	0F	V Linearity	Normal (50/60)/Wide (50/60)	A0/A4	(9F/AC)/(22/2D)	3-0
	08	BOW	7	0F	AFC Bow	Normal (50/60)/Wide (50/60)	A0/A4	(A5/B2)/(28/33)	7-4
	09	AGL	7	0F	AFC Angle	Normal (50/60)/Wide (50/60)	A0/A4	(A5/B2)/(28/33)	3-0
	0A	UPN	1F	3F	Upper Pin	Normal (50/60)/Wide (50/60)	A0/A4	(A3/B0)/(26/31)	7-2
	0B	LPN	1F	3F	Lower Pin	Normal (50/60)/Wide (50/60)	A0/A4	(A7/B4)/(2A/35)	7-2
	0C	HBL	0	1	H Blanking on/off		A0	9A	1
	0D	LBL	2	0F	Left H Blanking	Normal (50/60)/Wide (50/60)	A0/A4	(A6/B3)/(29/34)	7-4
	0E	RBL	0B	0F	Right H Blanking	Normal (50/60)/Wide (50/60)	A0/A4	(A6/B3)/(29/34)	3-0
WHB	00	RDR	25	3F	R Drive	DYNAMIC/others	A0	C0/BA	7-2
	01	GDR	25	3F	G Drive	DYNAMIC/others	A0	C1/BB	7-2
	02	BDR	25	3F	B Drive	DYNAMIC/others	A0	C2/BC	7-2
	03	RCT	0A	0F	R Cutoff	SECAM/others	A0	C3/BD	3-0
	04	GCT	7	0F	G Cutoff	SECAM/others	A0	C4/BE	7-4
	05	BCT	7	0F	B Cutoff	SECAM/others	A0	C4/BE	3-0
	06	BMN	15	1F	Brightness Minimum Data		A0	22	6-2
	07	SBR	1F	3F	Sub Brightness Control		A0	23	7-2
	08	APB	2	3	Sub Bright Ctl SW for PNC #3		A0	23	1-0
SAJ	00	PMX	33	3F	Picture Maximum Data	Non-Wide/Wide	A0	21/20	7-2
	01	SHU	8	0F	Sub Hue Control	TV/Video	A0	24/38	5-2
	02	SSH	3	0F	Sub Sharpness Control	TV/Video	A0	25/36	7-4
	03	SCL	1F	3F	Sub Color Control	(NTSC/others)/Wide (NTSC/others)	A0	(37/26)/(3C/3B)	7-2
VP	00	EHT	4	0F	EHT Comp	50/60Hz	A0[/A4]	(A4/B1)[/(27/32)]	3-0
	01	GMA	2	03	Gamma Correction	Refer NVM Map A4	A4	66/67/68/69	1-0
	02	APG	0	1	Gamma Ctl SW for PNC #3		A4	66/67/68/69	2
	03	YDL	6	0F	Y Delay	PAL/SECAM/NTSC/DVD	A4	3C/3D/3E/3F	3-0
	04	SST	1	03	SECAM ID Start Position	SECAM/PAL	A4	6A/6C	5-4
	05	SSP	1	03	SECAM ID Stop Position	SECAM/PAL	A4	6A/6C	7-6
	06	RLM	0	3	RGB Limit		A0	83	1-0
	07	SLV	2	03	SECAM ID Level	SECAM/PAL	A4	6B/6D	1-0
	08	SBF	22	3F	SECAM BELL f0	SECAM/PAL	A4	6B/6D	7-2
	09	DYC	1	1	Dynamic Color on/off		A0	8C	1
	0A	ABL	1	1	ABL Mode Switching	STANDARD Always 0	A0	8B	1
	0B	VTH	1	1	ABL Detection Vth Switching		A0	8B	0
	0C	SFO	1	1	FO Switching for Sharpness	NTSC/others	A4	5C/59	1
	0D	DCX	1	1	DC Trans. Ratio Switching		A0	88	1

Adjustment Item Table

TVG	Functionality		Initial	Range	Function	Table & Note	NVM Address		
Category	No.	Name					Slave	Sub	Bit
VP	0E	SHT	1	1	Pre-/Overshoot ratio Switch	NTSC/others	A4	5D/5A	0
	0F	HDW	0	1	H Drive Pulse Width Switch		A0	80	6
	10	AFC	1	03	AFC Gain Control	TV/Video/Text	A0	28/29/2A	1-0
	11	HOS	7	0F	H Oscillation		A0	8E	7-4
	12	HSS	0	1	Slice Level of H Sync Sep.		A0	8F	1
	13	VSS	0	1	Slice Level of V Sync Sep.		A0	8F	0
	14	HMS	1	1	Macro Vision C/m off/on	50/60Hz	A0[/A4]	(9D/AA)[/(20/2B)]	0
	15	YUV	0	1	YUV Switch Control		A0	80	2
	16	CDV	1	3	CD mode for Video	Video only	A0	2B	5-4
	17	RON	1	1	R ON	not memorized	A0	81	2
	18	GON	1	1	G ON	not memorized	A0	81	1
	19	BON	1	1	B ON	not memorized	A0	81	0
	1A	PON	1	1	P ON	not memorized	A0	80	7
	1B	AXN	1	1	AXIS SW	NTSC/others (only for Dyna)	A0	(37/26)[/(3C/3B)]	0
	1C	RSL	0	1	RGB SEL		A0	8C	0
	1D	VBW	1	3	VBLKW		A0	96	1-0
	1E	RFP	0	1	REFP		A0	94	0
	1F	JMP	0	1	Jump		A0	9A	0
	20	VMC	2	3	VM Off		A0	83	3-2
AP	00	INF	5	3F	Input Attenuation When surround off		A0	73	5-0
	01	INS	0A	3F	Input Attenuation When surround on (XG-ONLY)		A0	74	5-0
	02	SEF	0	0F	Surround Effect Control (XA-ONLY)		A0	76	6-3
	03	PH1	3	3	Phase 1 Register Selection		A0	77	1-0
	04	PH2	0	3	Phase 2 Register Selection (XG-ONLY)		A0	77	3-2
	05	PH3	0	3	Phase 3 Register Selection (XG-ONLY)		A0	77	5-4
	06	PH4	0	3	Phase 4 Register Selection (XG-ONLY)		A0	77	7-6
	07	BCS	2	3	Bass Center Shift		A0	57	1-0
	08	TCS	2	3	Treble Center Shift		A0	58	1-0
	09	TRF	2	3	RF Treble Offset		A0	58	5-4
MSP	00	WST	15	FF	W/G Stereo Threshold		A0	60	7-0
	01	WBT	EA	FF	W/G Bilingual Threshold		A0	61	7-0
	02	WLL	5	FF	W/G Monaural Threshold		A0	62	7-0
	03	WAC	0	0F	W/G Agreement Count		A0	63	3-0
	04	WDL	30	FF	W/G Search Delay		A0	64	7-0
	05	NDL	20	FF	NICAM Search Delay		A0	65	7-0
	06	SDL	10	FF	Stereo Status Read Delay		A0	66	7-0
	07	AGC	1	1	AGC Switch Auto/Constant		A0	68	7
	08	REL	28	3F	AGC Gain at Constant Mode		A0	68	6-1
	09	CRM	0	1	Carrier muting on/off		A0	67	1
	0A	ACO	1	1	Audio Clock out on/off		A0	69	5

Adjustment Item Table

TVG	Functionality		Init.	Range	Function	Table & Note	NVM Address		
Category	No.	Name					Slave	Sub	Bit
MSP	0B	FP	1B	7F	FM Prescale for non-M system		A0	6A	6-0
	0C	FPM	32	7F	FM Prescale for M system		A0	6B	6-0
	0D	FH	36	7F	FM Prescale for HDEV		A0	6C	6-0
	0E	FHM	65	7F	FM Prescale for HDEV and M		A0	6D	6-0
	0F	WGP	2A	7F	W/G Prescale		A0	6E	6-0
	10	NIP	6D	7F	NICAM Prescale		A0	6F	6-0
	11	ERR	50	FF	Auto FM Switch Threshold		A0	70	7-0
	12	VOL	6D	FF	Speaker Gain 7000h to 7ff0h		A4	62	7-0
TXT	00	TXH	0	3	Teletext Horizontal Position		A4	55	1-0
	01	TXV	0	3	Teletext Vertical Position		A4	55	5-4
OPM	00	OSH	0A	3F	OSD H Position	Option-Misc	A0	27	7-2
	01	COM	1	03	Comb Selection		A0	50	7-6
	02	APC	1	1	APC Switch		A0	4F	5
	03	TSY	0	03	TV Sys at Auto TV Sys		A0	4F	4-3
	04	MUT	0	1	No Signal Mute		A0	4F	0
	05	AFM	0	1	Auto FM Switch		A0	4F	1
	06	RFB	0	3	C-BPF Control		A0	50	5-4
	07	TVO	0	7	Tilt to V-Angle Offset		A0	50	2-0
	08	DBL	0	1	Disable Blueback Function		A0	4F	2
	09	SCH	1	7F	CH Selection for Shipping Condition	NTSC Models only	A0	3D	6-0
	0A	SCA	1	1	Cable / Air selection for shipping condition	NTSC Models only	A0	3D	7
OPB	00	OP1	FF	FF	Optional Bits 1 (see specified pages)	Option-Bits	A0	2D	7-0
	01	OP2	62	FF	Optional Bits 2 (see specified pages)		A0	2E	7-0
	02	OP3	B1	FF	Optional Bits 3 (see specified pages)		A0	2F	7-0
	03	OP4	02	FF	Optional Bits 4 (see specified pages)		A0	30	7-0

NOTE

- shaded items are fixed data.
- Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
- Note for Different Data Those are the standard data values written on the microprocessor. Therefore, the data values of the modes and stored respectively in the memory.
  In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

OPTION NOTE

OP1

Item	XTAL 4.43	XTAL 3.58	SECAM	2nd. Lang	B/G	I	D/K	M
KV-XJ29N90	1	1	1	1	1	1	1	1

NOTE: When Bit 7, 6 & 5 = 000, Only PAL color system is selected.
When Bit 7 is selected, Auto, PAL & NTSC 4.43 Color system is enable.
When Option is single color system, Color system cannot be changed & "AUTO" will not be displayed.

OP2

Item	TOP	NICAM	HDEV	Thai Bil	Dis Fav.	DVD Input	AV Input	
KV-XJ29N90	0	1	1	0	0	1	1	0

AV Input 00 = no AV Input 01 = 1 AV Input
10/11 = 2 AV Input
DVD Input Effective only when "AV Input" is set to 2 AV Input
Dis Fav. Disable Favorite Channel (Only Effective For 21" & 14" Models Only)

OP3

Item	PIC Rot*1	2199 Curve*1	Auto PIC	A-TV sys	US ST	AV Mono*1	11 KEY	Color SW*2&*1
KV-XJ29N90	1	0	1	1	0	0	0	1

PIC Rot*1 PIC Rotation Feature Switch 0 = disabled, 1 = enabled
2199 Curve*1 2199 Volume Curve Selection 0 = Others, 1 = 2199 Volume Curve.
Auto PIC Auto Picture Improvement 0 = inactive, 1 = active
A-TV sys Auto TV System in Auto Program 0 = disabled, 1 = enabled
US ST USA Stereo 0 = disabled, 1 = enabled
AV MONO*1 AV Mono models 0 = Stereo, 1 = Mono
(No Balance & Surround selection)
11 Key Front Key Selection 0 = 7 key model, 1 = 11 key model
Color SW*2&*1 Color Data Selection in Dynamic Mode 0 = 65 (No PIP), 1 = 57 (PIP)

Note: *1 - For XA-21/XG25 Models Only
*2 - For XA-34/29/25 Models Only

OP4

Item	(unused)	(unused)	(unused)	(unused)	(unused)	Vid NTSC 3.58	AP_XG*1	(unused)
KV-XJ29N90	0	0	0	0	0	0	1	0

AP_XG*1 To select the XG AP (board B6) 0: No; 1 = Yes

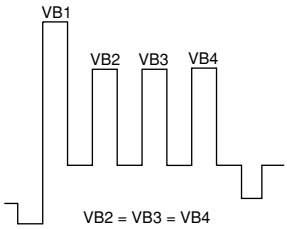
Note: *1 - For XA-21/XG25 Models Only

Video NTSC3.58* Video Colour System 0 = Multi System, 1 = Single System (NTSC3.58)

4-3. PICTURE QUALITY ADJUSTMENTS

SUB COLOR ADJUSTMENT

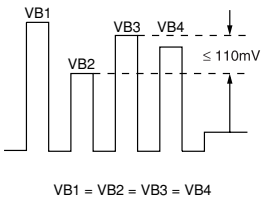
1. Input a PAL color-bar.
2. Set to the following condition:
   PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
3. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
4. Set to Service Mode and select SAJ 03 'SCL' with [1] and [4] of the commander then adjust to VB2=VB3=VB4 with [3] and [6].
5. Press [MUTING] → [0] of the commander to write the data.
6. Adjust SAJ 03 'SCL' as step 2 to 5 when receiving NTSC color-bar.



VB2 = VB3 = VB4 (Difference is within 70mV)

SUB HUE ADJUSTMENT

1. Select Video 3.58.
2. Input a NTSC, color-bar, video into Video.
3. Set the following condition:
   PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
4. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
5. Select SAJ 01 'SHU' with [1] and [4] of the commander by setting to Service Mode and adjust to VB1=VB2=VB3=VB4 with [3] and [6].



The highest level of VB1,VB2,VB3,VB4 must be aligned at the same line. Ideal difference level between VB2 and VB3 should be within ± 110mV.

6. Press [MUTING] → [0] of the commander to write the data.

4-4. DEFLECTION ADJUSTMENT

1. Set to Service Mode.
2. Input PAL color bar.
3. Using the [1] and [4] button, select category GEO (Service Mode).
4. Raise/lower the data using the [3] and [6] buttons. Select and adjust the following items to obtain optimum image.

Service Item

GEO :	00	HPS	H POSITION
	01	HSZ	H SIZE
	02	PAP	PIN AMP
	03	TLT	TILT
	04	VPS	V POSITION
	05	VSZ	V SIZE
	06	SCO	S CORRECTION
	07	VLN	V LINEARITY
	08	BOW	AFC BOW
	09	AGL	AFC ANGLE
	0A	UPN	UPPER CORNER PIN
	0B	LPN	LOWER CORNER PIN

5. Input 525/60Hz signal.
6. Using the [1] and [4] button select category GEO (Service Mode).
7. Select and adjust the following items to obtain optimum image. Raise/lower the data with the [3] and [6] buttons.

Service Item

GEO :	00	HPS	H POSITION
	01	HSZ	H SIZE
	02	PAP	PIN AMP
	03	TLT	TILT
	04	VPS	V POSITION
	05	VSZ	V SIZE
	06	SCO	S CORRECTION
	07	VLN	V LINEARITY
	08	BOW	AFC BOW
	09	AGL	AFC ANGLE
	0A	UPN	UPPER CORNER PIN
	0B	LPN	LOWER CORNER PIN

4-5. H-TRAPEZOID ADJUSTMENT

1. Receive cross hatch/dot signal.

2. Adjust RV1801 on C6 board to make H-trapezoid distortion best.

4-6. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

1. Enter to Service Mode.

2. Press commander buttons [5] and [0] (Data Initialize), and [2] and [0] (Data Copy) to initialize the data.

3. Call each item number and check if the respective screen shows the normal picture.
   In cases where items are not well adjusted, rectify the items with fine adjustment.
   Write the data per each item number ([MUTING] +[0]).

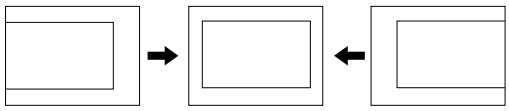
4. Select item numbers "OPB 00" (OP1), "OPB 01" (OP2), "OPB 02" (OP3), "OPB 03" (OP4) and respectively set the bit per model with command buttons [3] and [6].

5. Press commander buttons [8] and [0] (Test Normal) to return to the data that was set on the shipment from the factory. (This will also cancel Service Mode.)

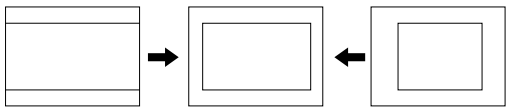
4-7. PICTURE DISTORTION ADJUSTMENT (1)

Item Number 00 – 0B

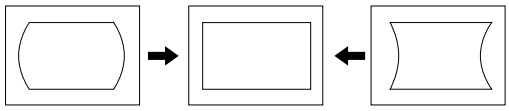
GEO 0 HPS (H POSITION)



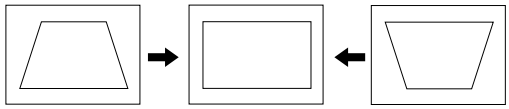
GEO 1 HSZ (H SIZE)



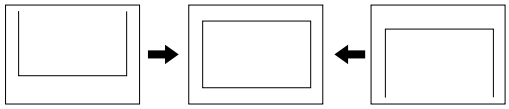
GEO 2 PAP (PIN AMP)



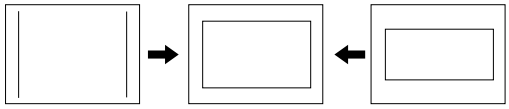
GEO 3 TLT (TRAPEZIUM)



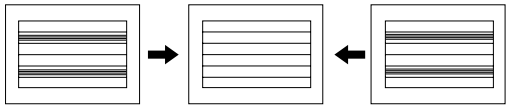
GEO 4 VPS (V POSITION)



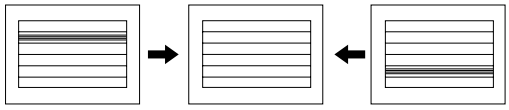
GEO 5 VSZ (V SIZE)



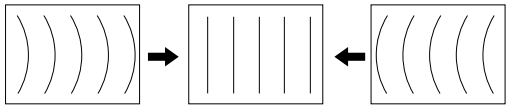
GEO 6 SCO (VERTICAL S-Correction)



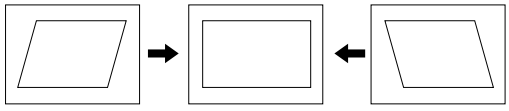
GEO 7 VLN (V LINEARITY)



GEO 8 BOW (AFC.BOW)

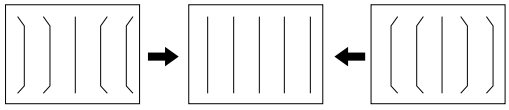


GEO 9 AGL (AFC.ANGLE)



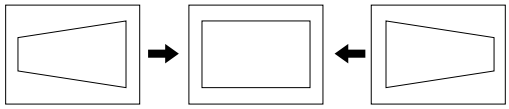
GEO 0A UPN (UPPER CORNER PIN)

GEO 0B LPN (LOWER CORNER PIN)



PICTURE DISTORTION ADJUSTMENT (2)

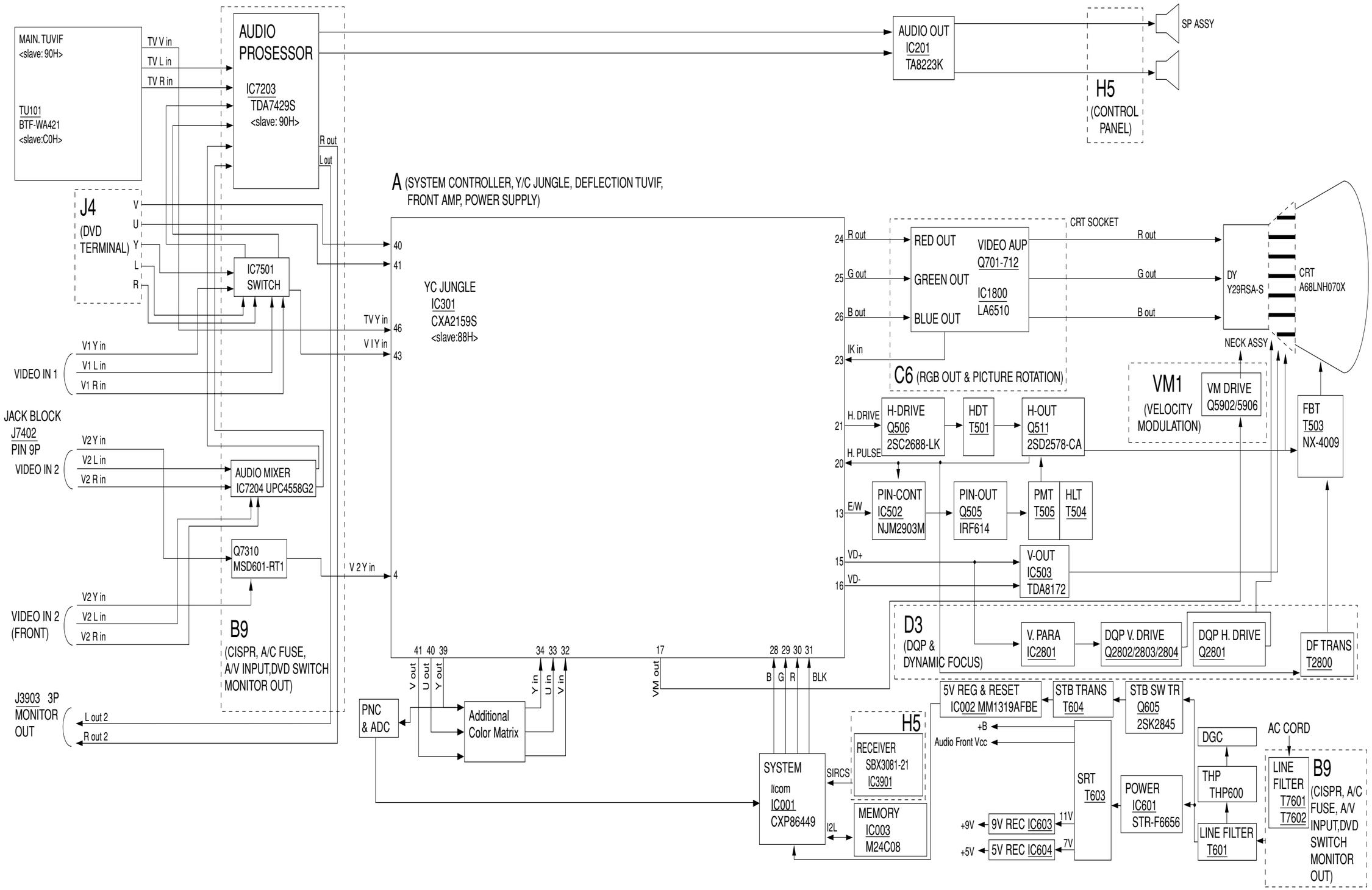
H-TRAPEZOID (Rotate RV1801)



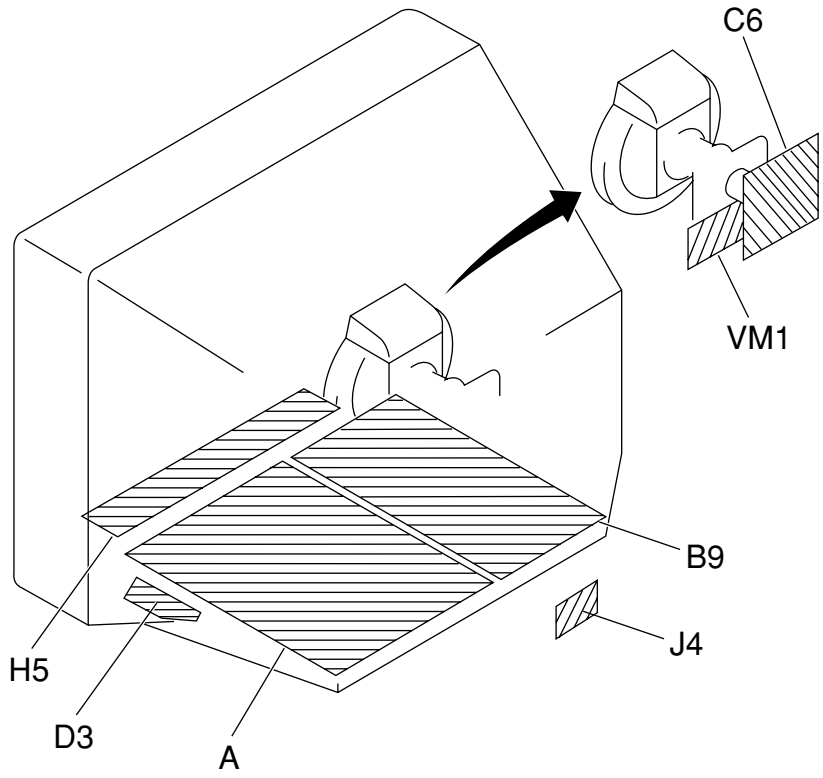
KV-XJ29N90 RM-915

SECTION 5 DIAGRAMS

5-1. BLOCK DIAGRAM



5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAM

Note:

- All capacitors are in µF unless otherwise noted.
- All electrolytic capacitors are rated at 50V unless otherwise noted.
- All resistors are in ohms.
  kΩ = 1000Ω, MΩ = 1000kΩ
- Indication of resistance which does not have rating electrical power is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4W (CHIP: 1/10W)

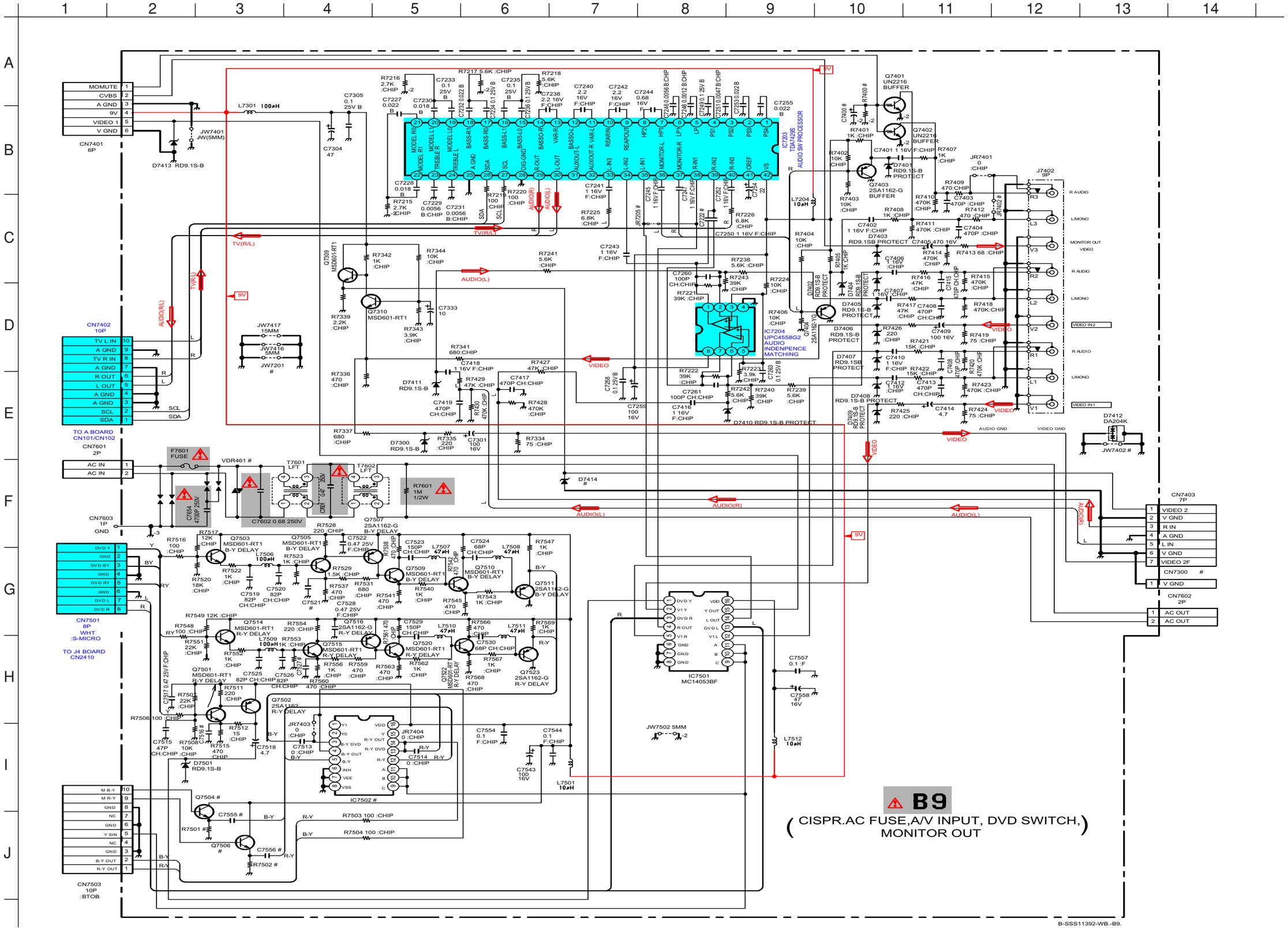
- : nonflammable resistor.
- △ : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B unless otherwise noted.
- **Readings are taken with a color-bar signal input.**
  no mark : Common
  Underline : PAL
  ( ) : SECAM
  [ ] : NTSC 3.58
- **Readings are taken with a 10MΩ digital multimeter.**
- **Voltage are dc with respect to ground unless otherwise noted.**
- **Voltage variations may be noted due to normal production tolerances.**
- **All voltage are in V.**
- **✻ : Cannot be measured.**
- **Circled numbers are waveform references.**
- **: B +bus.**
- **: B –bus.**
- **: signal path.**

Reference information

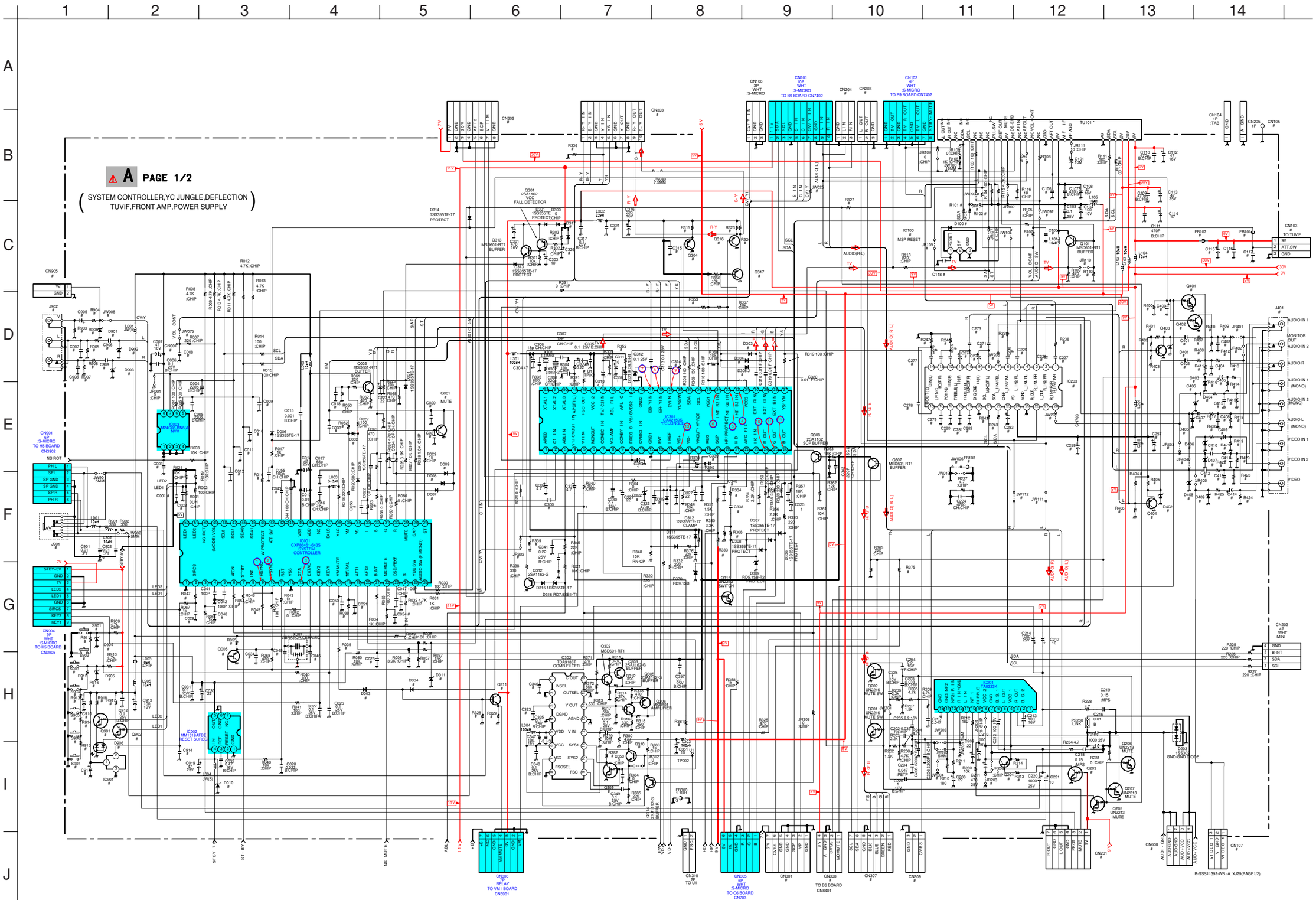
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: ✻	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The component identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

(1) B9 Board Schematic Diagram

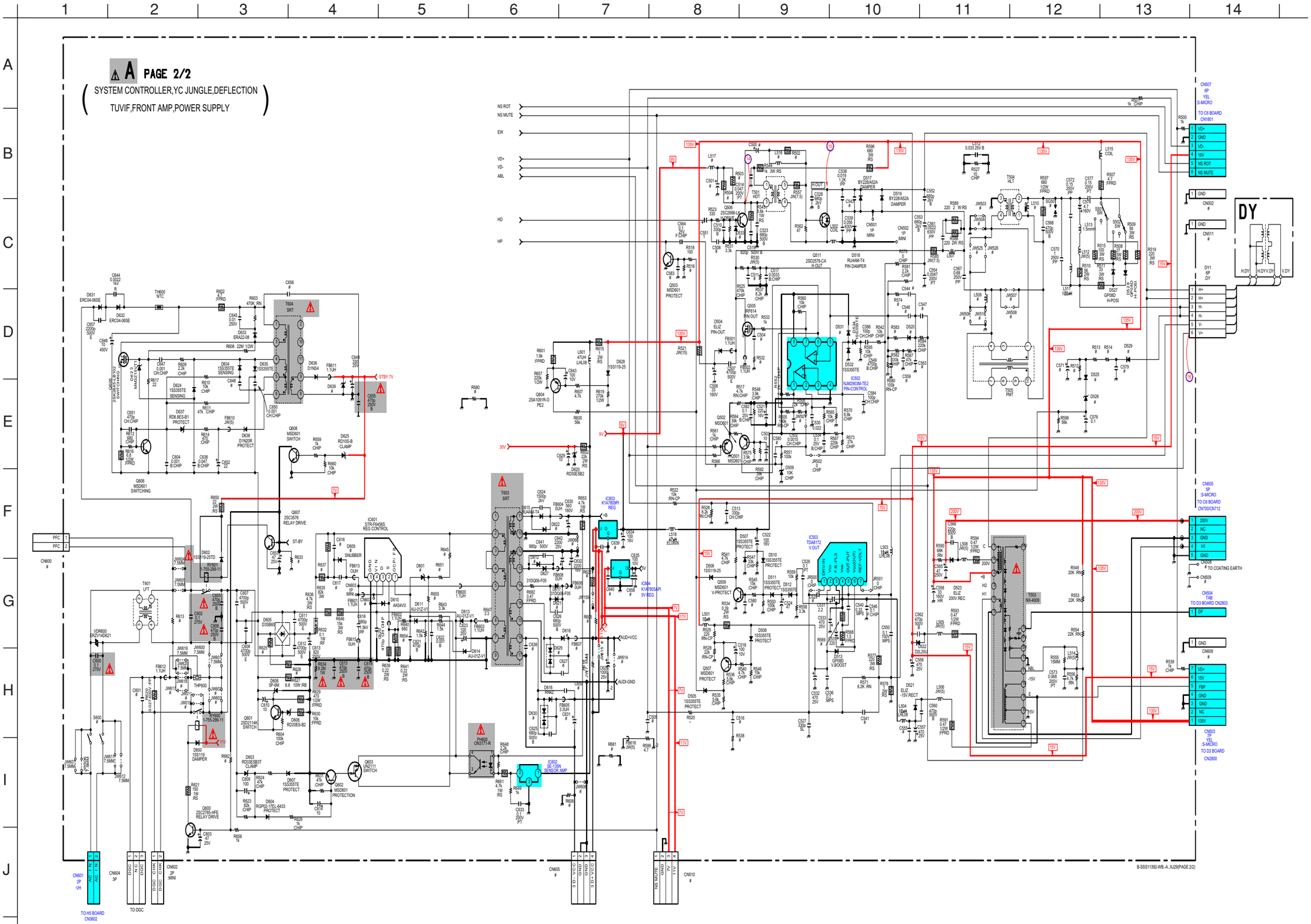


(2) A Board Schematic Diagram

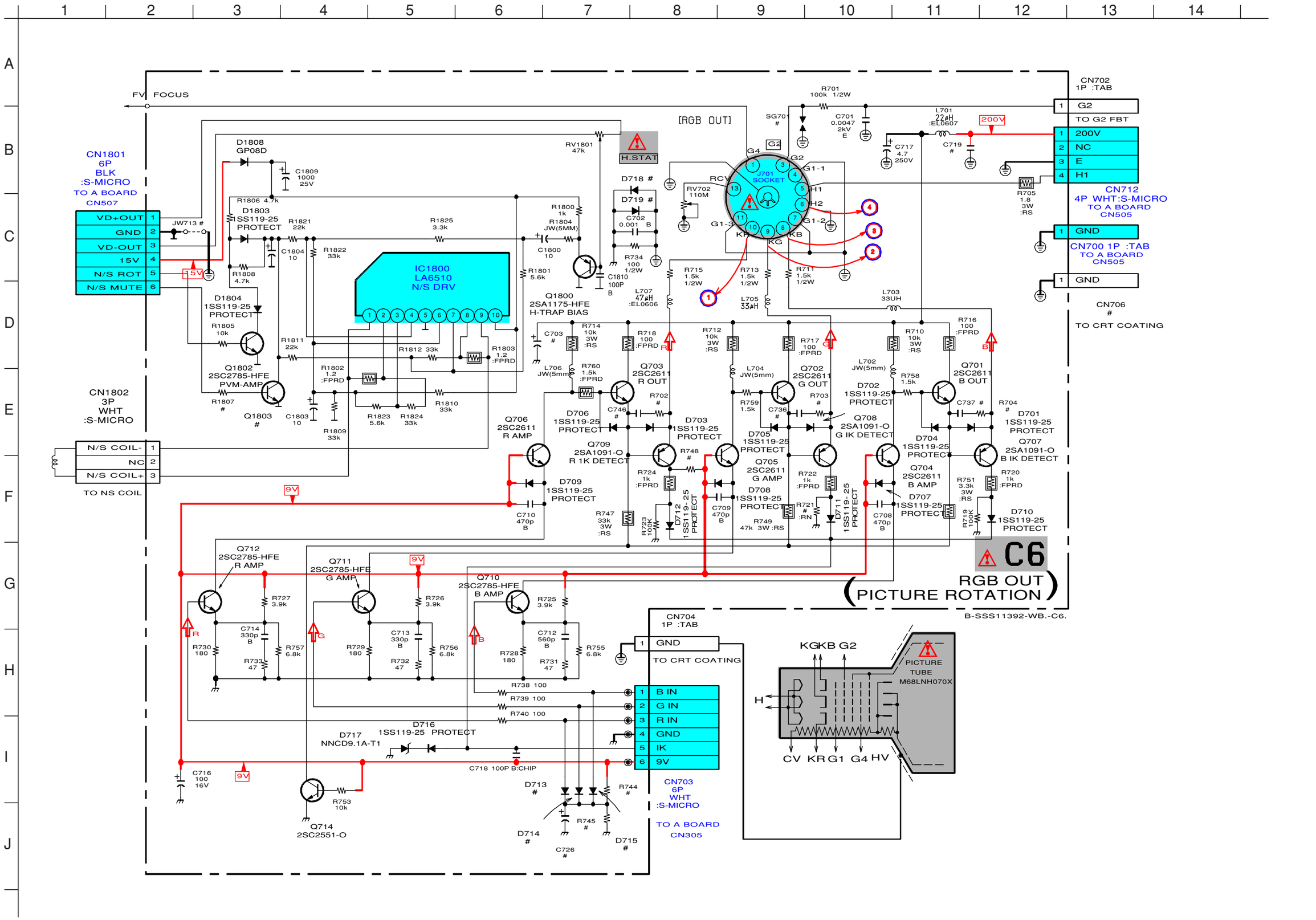

A
PAGE 1/2
(SYSTEM CONTROLLER,YC JUNGLE,DEFLECTION
TUVIF,FRONT AMP,POWER SUPPLY)
IC201
CXP86401-643S
SYSTEM
CONTROLLER
IC301
MSP34G0G-QI-B3
MULTISTANDARD
SOUND PROCESSOR
IC302
TDA9183T
COMB FILTER
IC100
MSP RESET
IC203
TA2223K
IC002
MM1319AFBE
RESET SURFACE
IC001
M54564FP-A01
NV-M
CN106
CN101
CN102
CN302
CN303
CN104
CN205
CN105
CN103
TO TUVIF
CN202
CN901
CN902
CN903
CN904
CN905
CN306
CN305
CN310
CN301
CN308
CN307
CN309
CN201
CN608
CN107
TU101
AUDIO(R,L)
AUDIO Ch(R,L)
AUDIO Ch(R,L)
AUDIO Ch

⚠A PAGE 2/2

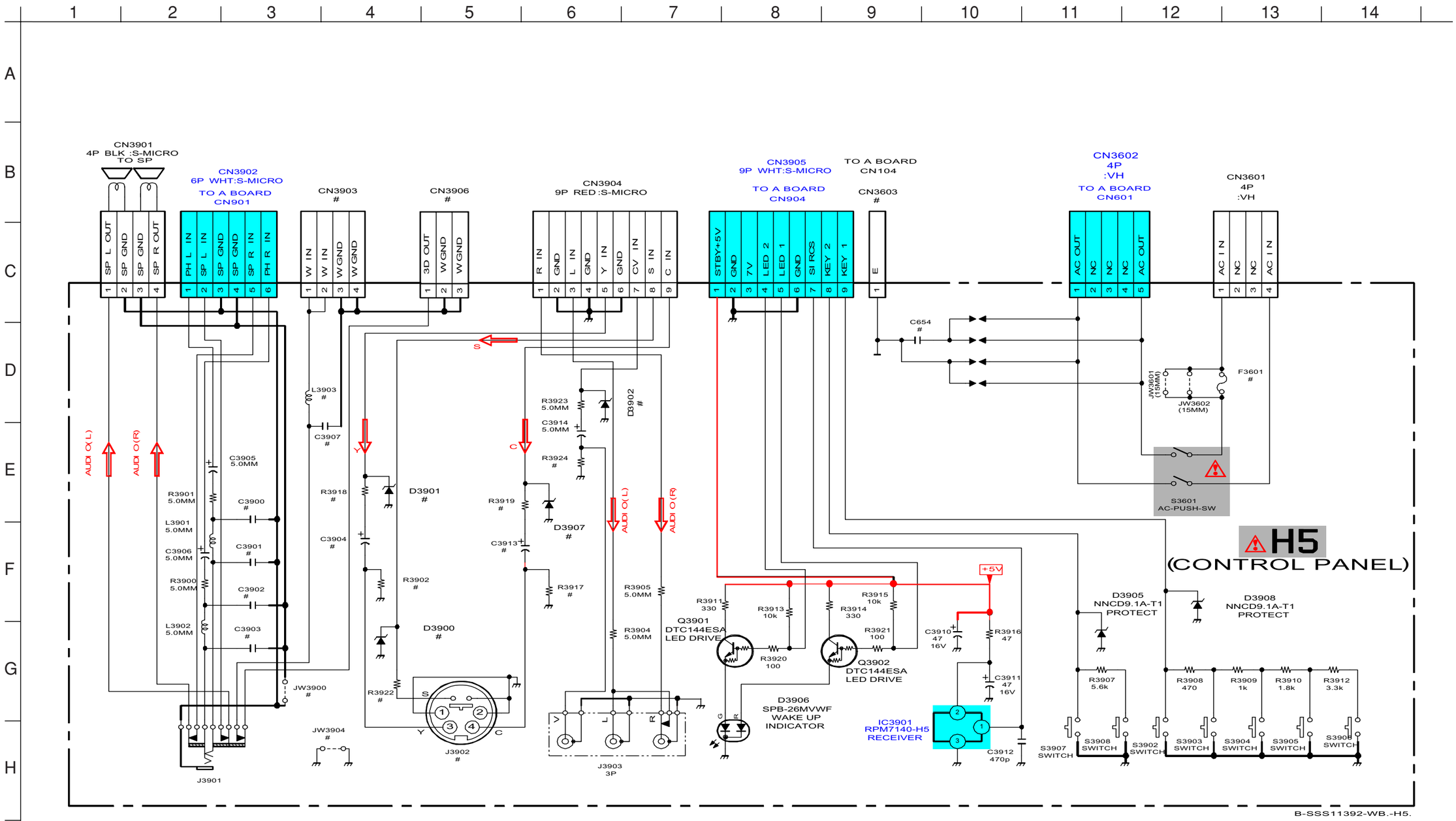
(SYSTEM CONTROLLER,YC JUNGLE,DEFLECTION
TUVIF,FRONT AMP,POWER SUPPLY)

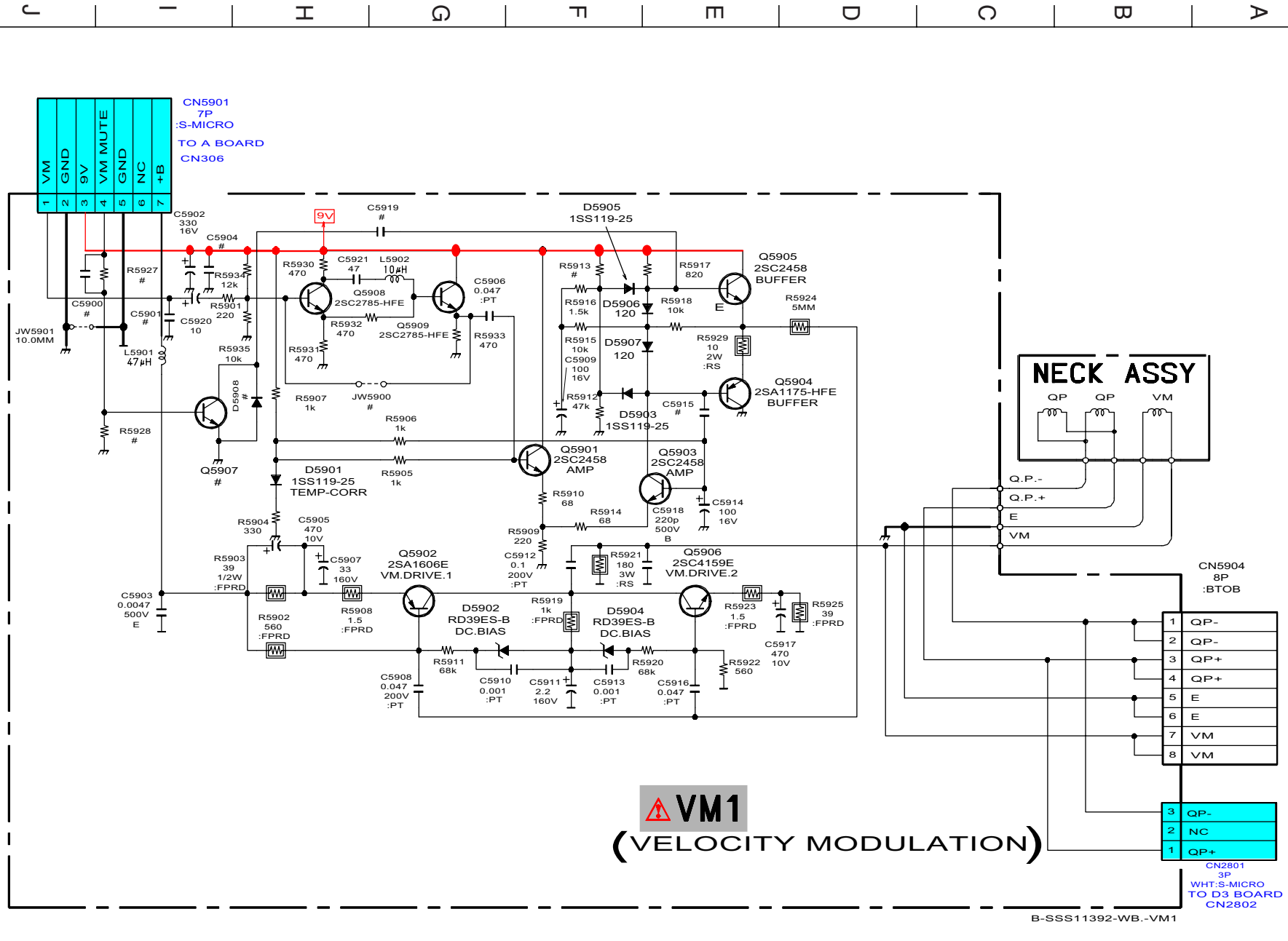


(3) C6 Board Schematic Diagram

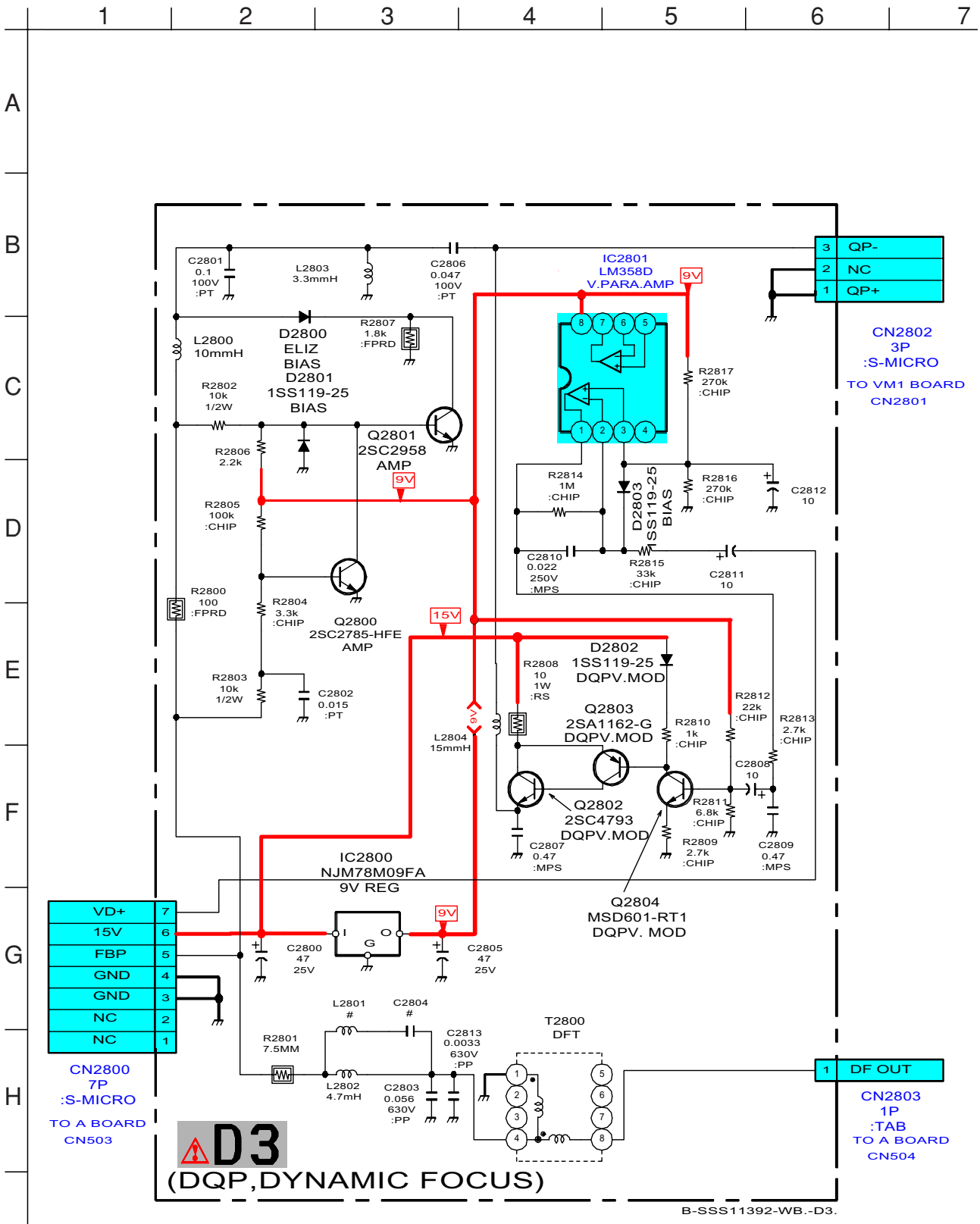


(4) H5 Board Schematic Diagram

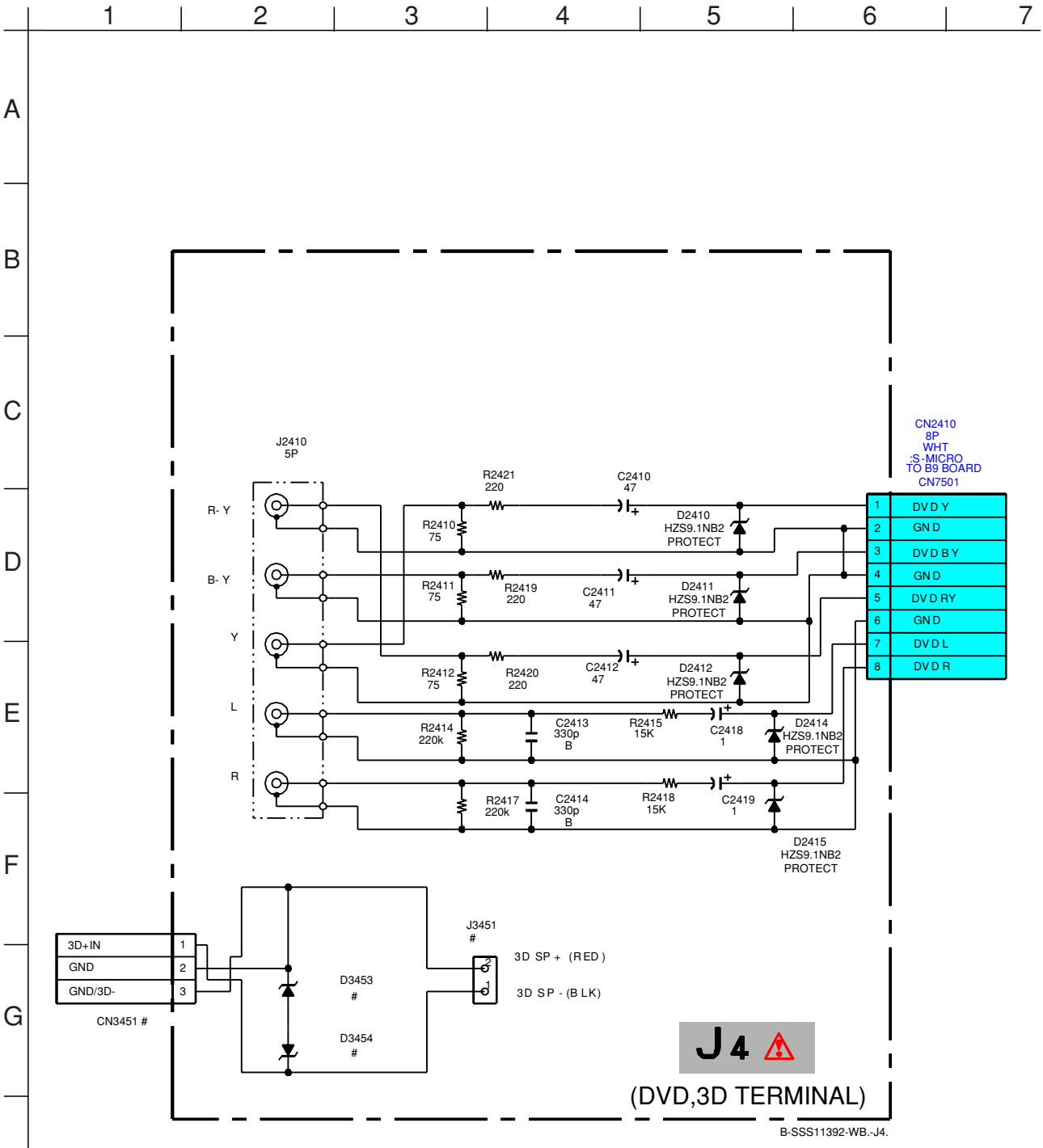



CN5901
7P
:S-MICRO
TO A BOARD
CN306
VM
GND
9V
VM MUTE
GND
NC
+B
9V
D5905
1SS119-25
Q5905
2SC2458
BUFFER
Q5904
2SA1175-HFE
BUFFER
Q5901
2SC2458
AMP
Q5903
2SC2458
AMP
Q5902
2SA1606E
VM.DRIVE.1
Q5906
2SC4159E
VM.DRIVE.2
Q5908
2SC2785-HFE
Q5909
2SC2785-HFE
Q5907
D5901
1SS119-25
TEMP-CORR
D5902
RD39ES-B
DC.BIAS
D5904
RD39ES-B
DC.BIAS
D5903
1SS119-25
D5906
120
D5907
120
NECK ASSY
QP
QP
VM
Q.P.-
Q.P.+
E
VM
CN5904
8P
:BTOB
1 QP-
2 QP-
3 QP+
4 QP+
5 E
6 E
7 VM
8 VM
3 QP-
2 NC
1 QP+
CN2801
3P
WHT:S-MICRO
TO D3 BOARD
CN2802
VM1
(VELOCITY MODULATION)
B-SSS11392-WB.-VM1

(6) D3 Board Schematic Diagram



(7) J4 Board Schematic Diagram



5-4. VOLTAGE LIST MEASUREMENT

A (1/2) BOARD VOLTAGE LIST

Ref	Pin No	Voltage[v]
IC001	1	0
	2	4.9
	3	*
	4	5.0
	5	5.0
	6	0
	7	3.9
	8	4.9
	9	0.4
	10	4.9
	11	5.0
	12	0
	13	2.2
	14	2.1
	15	5.0
	16	(5.0)[0.2]
	17	0
	18	0
	19	2.8
	20	*
	21	5.0
	22	0
	23	5.0
	24	*
	25	*
	26	5.0
	27	(3.9)[4.9]
	28	5.0
	29	4.9
	30	0
	31	0
	32	0
	33	5.0
	34	(*)[0]
	35	0
	36	2.6
	37	2.5
	38	4.9
	39	5.0
	40	0
	41	1.0
	42	1.0
	43	0
	44	5.0
	45	5.0
	46	4.6
	47	5.0
	48	4.6
	49	4.6
	50	0
	51	0
	52	0
IC002	1	0
	2	5.0
	3	4.9
	4	7.3
	5	5.9
	6	0
	7	*
IC003	1	0
	2	0
	3	0
	4	0
	5	5.0
	6	5.0
	7	5.0
	8	5.0
IC100	1	4.9
	2	5.0
	3	0
IC201	1	1.3
	2	22.2
	3	11.7
	4	22.6
	5	11.7
	6	22.2
	7	0
	8	22.5
	9	11.6
	10	0.6
	11	0
	12	0
	13	0
	14	0.6
	15	0
IC301	1	3.3
	2	(3.4)[5.0]
	3	2.3
	4	5.0
	5	4.8
	6	4.3
	7	5.4
	8	4.5
	9	4.9
	10	*
	11	*
	12	0
	13	8.2
	14	2.4
	15	3.5
	16	3.5
	17	5.7
	18	7.7
	19	1.0
	20	3.6
	21	3.2
	22	3.9
	23	3.3
	24	2.5
	25	2.5
	26	2.6
	27	*
	28	4.5
	29	4.5
	30	4.5
	31	4.5
	32	4.5
	33	4.0
	34	3.6
	35	*
	36	*
	37	*
	38	4.6
	39	*
	40	5.1
	41	5.0
	42	0
	43	4.9
	44	*
	45	7.4
	46	5.0
	47	8.6
	48	*
	49	4.3
	50	0
	51	0
	52	2.7
IC502	1	0.9
	2	3.6
	3	1.6
	4	0
	5	2.9
	6	2.4
	7	6.9
	8	8.9
IC503	1	1.6
	2	12.9
	3	13.14
	4	14.6
	5	*
	6	13.0
	7	1.6
IC602	1	121.2
	2	127.7
	3	121.2
IC603	I	12.7
	G	0
	O	8.9
IC604	I	8.2
	G	5.0
	O	0
Q001	B	0.8
	C	0
	E	0
Q002	B	0
	C	5.0
	E	0
Q003	B	5.0
	C	0
	E	4.8
Q004	B	0
	C	4.9
	E	0
Q101	B	2.9
	C	8.8
	E	2.2
Q201	B	1.1
	C	0
	E	0
Q202	B	1.1
	C	0
	E	0
Q205	B	11.7
	C	0
	E	0
Q206	B	0
	C	0
	E	0
Q207	B	11.7
	C	0
	E	0
Q301	B	12.6
	C	12.7
	E	12.7
Q302	B	4.7
	C	8.1
	E	4.1

A (2/2) BOARD VOLTAGE LIST

Ref	Pin No	Voltage[v]	Ref	Pin No	Voltage[v]	Ref	Pin No	Voltage[v]
Q303	B	7.9	Q501	B	3.5	Q601	B	*
	C	3.2		C	0		C	*
	E	3.4		E	0		E	*
Q304	B	3.4	Q502	B	4.2	Q602	B	1.1
	C	0		C	2.4		C	1.2
	E	4.0		E	4.0		E	1.0
Q305	B	4.1	Q503	B	0	Q603	B	1.2
	C	0		C	3.6		C	1.0
	E	4.7		E	0		E	1.2
Q306	B	4.1	Q505	B	6.9	Q604	B	*
	C	0		C	15.7		C	0
	E	(0.4)[0]		E	0		E	133.9
Q307	B	4.3	Q507	B	*	Q605	B	0
	C	4.3		C	0.1		C	0
	E	8.6		E	12.8		E	0
Q308	B	(4.1)[3.5]	Q509	B	0.6	Q606	B	0
	C	0.4		C	0		C	0
	E	(4.7)[1.0]		E	0		E	0
Q313	B	0	Q511	B	0	Q607	B	0.7
	C	12.5		C	*		C	0
	E	0		E	*		E	0
Q315	B	0	Q600	B	0	Q608	B	0
	C	2.5		C	*		C	0
	E	0		E	0		E	0.7

B9 BOARD VOLTAGE LIST

Ref	Pin No	Voltage[v]	Ref	Pin No	Voltage[v]	Ref	Pin No	Voltage[v]
IC7203	1	4.5		26	*	Q7309	B	5.7
	2	4.5		27	*		C	8.8
	3	4.5		28	0		E	5.0
	4	4.5		29	3.8	Q7310	B	5.7
	5	4.5		30	3.8		C	8.8
	6	4.5		31	3.8		E	1.8
	7	4.5		32	3.8	Q7401	B	0
	8	4.5		33	4.5		C	0
	9	4.5		34	4.5		E	0
	10	4.5		35	4.5	Q7402	B	*
	11	4.5		36	4.5		C	0
	12	4.5		37	4.5		E	0
	13	4.5		38	4.5	Q7403	B	5.2
	14	4.5		39	4.5		C	0
	15	4.5		40	4.5		E	4.6
	16	4.5		41	4.5	Q7404	B	5.2
	17	4.5		42	8.9		C	0
	18	4.5	IC7204	1	5.0		E	4.5
	19	4.5		2	2.5			
	20	4.5		3	2.5			
	21	4.5		4	0			
	22	4.5		5	2.5			
	23	4.5		6	2.5			
	24	0		7	5.0			
	25	*		8	*			

H5 BOARD VOLTAGE LIST

Ref	Pin No	Voltage[v]
IC3901	1	4.8
	2	4.8
	3	0
Q3901	B	0.1
	C	4.9
	E	0.1
Q3902	B	*
	C	1.2
	E	1.3

C6 BOARD VOLTAGE LIST

Ref	Pin No	Voltage[v]	Ref	Pin No	Voltage[v]
IC1800	1	10.5	Q705	B	8.8
	2	10.8		C	148
	3	8.2		E	8.2
	4	(0)[8.3]	Q706	B	8.8
	5	0		C	149
	6	7.7		E	8.3
	7	7.7	Q707	B	(146.7)[171.1]
	8	2.4		C	5
	9	2.6		E	142.4
	10	12.2	Q710	B	2.5
J701	G2	(1.7)[295]		C	8.3
	H1	0.7		E	2.5
	KB	142.8	Q712	B	2.4
	KG	(143.3)[146]		C	8.3
	KR	145.5		E	2.4
Q701	B	(146.6)[*]	Q714	B	*
	C	198.9		C	11.2
	E	(146.2)[173]		E	0
Q702	B	148.1	Q1800	B	3.8
	C	198.9		C	0
	E	(148.5)[177]		E	4.5
Q703	B	149.1			
	C	198.8			
	E	(149.2)[180]			
Q704	B	8.8			
	C	*			
	E	8.2			

VM1 BOARD VOLTAGE LIST

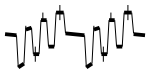
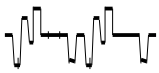
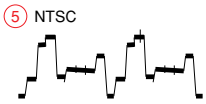
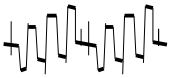
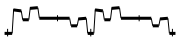
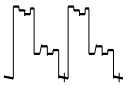
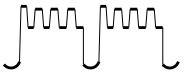
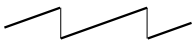
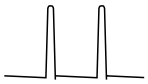
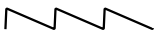
Ref	Pin No	Voltage[v]	Ref	Pin No	Voltage[v]
Q5901	B	2.6	Q5904	B	4.6
	C	8.7		C	5.0
	E	1.9		E	0
Q5902	B	134.9	Q5905	B	5.5
	C	(69.9)[73.9]		C	8.7
	E	134.9		E	5.1
Q5903	B	2.6	Q5906	B	0.2
	C	4.6		C	70
	E	1.9		E	72.3

D3 BOARD VOLTAGE LIST

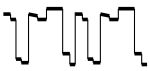
Ref	Pin No	Voltage[v]	Ref	Pin No	Voltage[v]
IC2801	1	0.1	Q2801	B	1.6
	2	6.3		C	2.3
	3	0.1		E	0
	4	0	Q2802	B	3.3
	5	6.4		C	12.1
	6	0.1		E	0
	7	0.1	Q2803	B	11.5
	8	12.8		C	3.3
Q2800	B	1.6		E	12.1
	C	2.0	Q2804	B	2.3
	E	0		C	12.0
				E	0

5-5. WAVEFORMS

A BOARD WAVEFORMS

① 4.8Vp-p (V)	② 5.1Vp-p (V)	③ 4.0Vp-p (V)	④ PAL/SECAM  1.2Vp-p (H)	④ NTSC  1.5Vp-p (H)
⑤ PAL/SECAM 1.0Vp-p (V)	⑤ NTSC  1.1Vp-p (V)	⑥ 0.2Vp-p (H)	⑦ PAL/SECAM  1.2Vp-p (H)	⑦ NTSC  1.4Vp-p (H)
⑧ PAL/SECAM 1.2Vp-p (H)	⑧ NTSC 1.2Vp-p (H)	⑨ PAL/SECAM 1.5Vp-p (H)	⑨ NTSC 1.5Vp-p (H)	⑩ PAL/SECAM 3.2Vp-p (H)
⑩ NTSC 3.4Vp-p (H)	⑪  3.4Vp-p (H)	⑫ PAL/SECAM  3.2Vp-p (H)	⑫ NTSC 3.58 3.2Vp-p (H)	⑫ NTSC 4.43 3.4Vp-p (H)
⑬ PAL/SECAM/NTSC 3.58  1.3Vp-p (H)	⑭ 106Vp-p	⑮  240Vp-p	⑯  1.1Vp-p (V)	

C6 BOARD WAVEFORMS

① NTSC : 15.7Vp-p (H)	①  PAL/SECAM : 135V	② NTSC : 13.6Vp-p (H)	② PAL/SECAM : 135Vp-p (H)	③ NTSC : 15.0Vp-p (H)	③ PAL/SECAM : 144Vp-p (H)
④ 23.0Vp-p (H)					

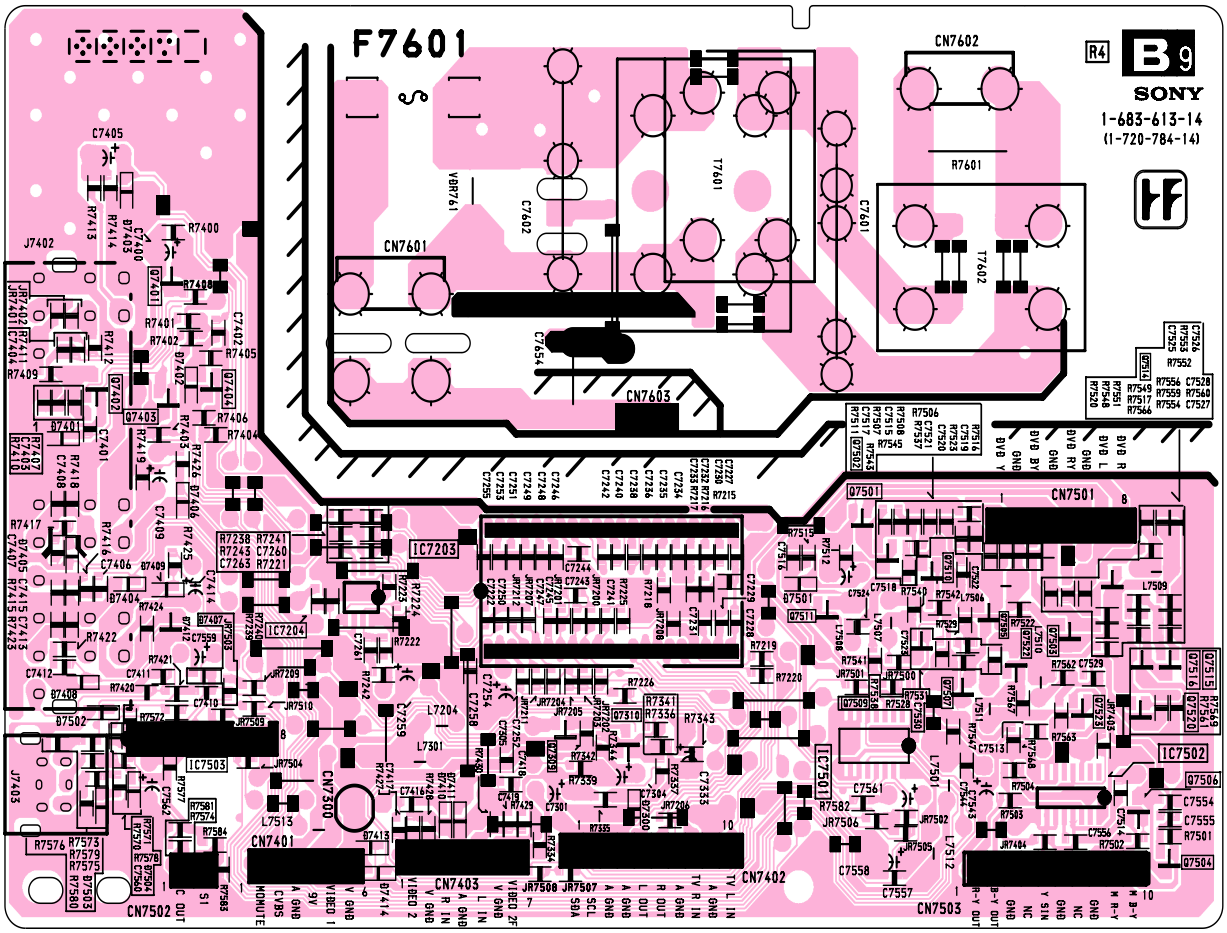
5-6. PRINTED WIRING BOARDS AND PARTS LOCATION

PRINTED WIRING BOARDS

B9 [CISPR, AC FUSE, A/V INPUT, DVD SWITCH, MONITOR OUT]

D3 [DQP, DYNAMIC FOCUS]

– B9 Board –



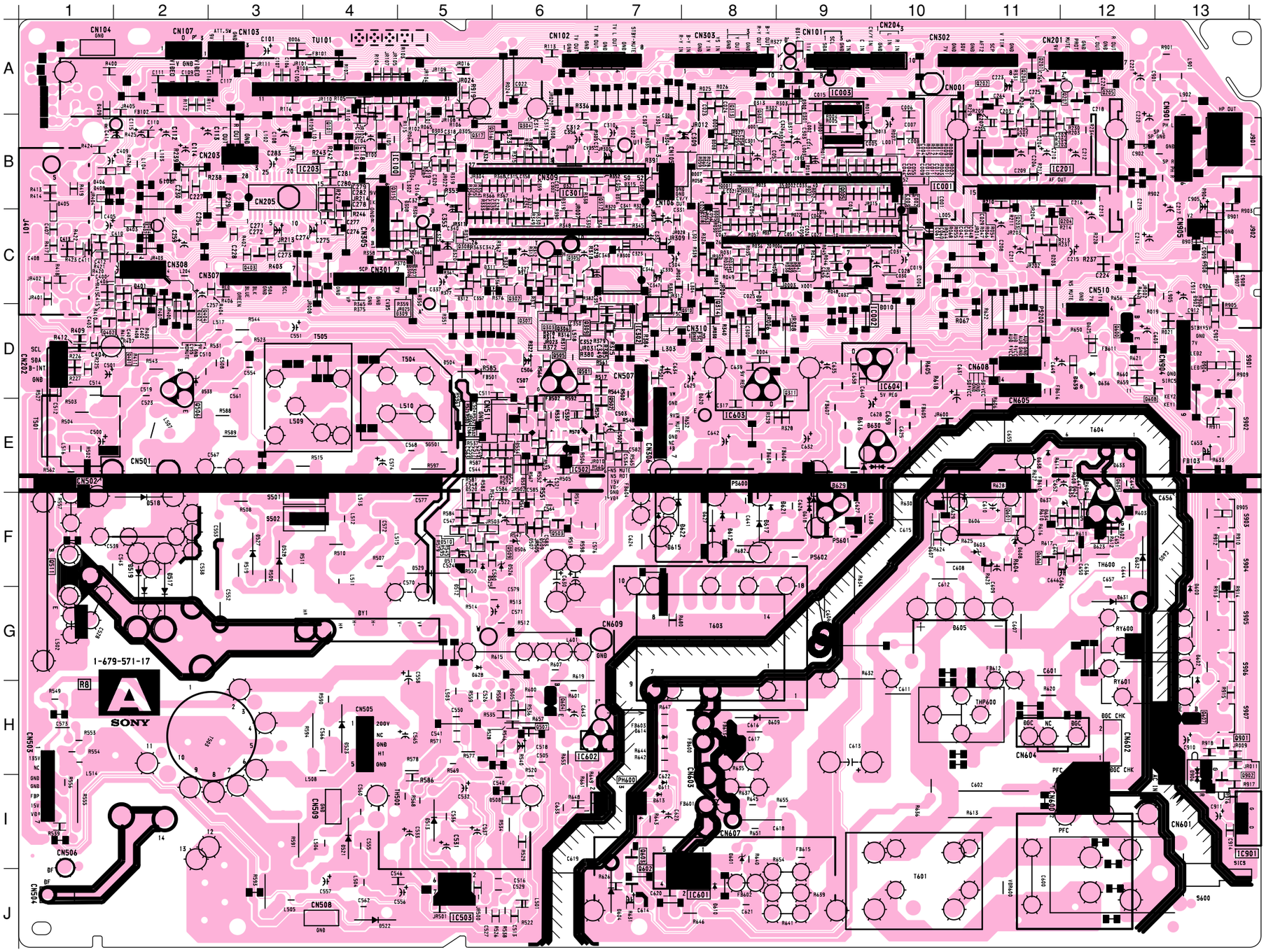
KV-XJ29N90
RM-915

PRINTED WIRING BOARDS

A [SYSTEM CONTROLLER, Y/C JUNGLE, DEFLECTION, TUVIF, FRONT AMP, POWER SUPPLY]

NOTE:
The circuit indicated at left contains high voltage of over 1220 Vp-p. Please pay attention when inspecting or repairing it to prevent an electric shock.

– A Board –



A BOARD

IC

IC001	B-10
IC002	D-10
IC003	A-9
IC100	B-4
IC201	B-11
IC203	B-4
IC301	B-6
IC302	D-7
IC502	E-6
IC503	J-5
IC601	J-8
IC602	H-7
IC603	E-8
IC604	D-10
IC901	I-13
PH600	I-7

TRANSISTOR

Q001	B-8
Q002	B-8
Q005	B-9
Q101	B-4
Q201	A-11
Q202	A-11
Q203	C-11
Q204	C-12
Q205	A-12
Q206	A-11
Q207	A-12
Q301	B-8
Q302	C-6
Q303	D-6
Q304	B-6
Q305	C-6
Q306	D-6
Q307	D-6
Q308	C-5
Q309	D-6
Q310	D-8
Q311	D-9
Q312	B-7
Q313	A-8
Q314	D-8
Q315	B-4
Q316	B-5
Q317	B-5
Q401	D-2
Q402	D-1
Q403	C-3
Q404	D-2
Q501	D-6
Q502	E-7
Q503	F-6
Q505	D-6
Q506	E-2
Q507	H-6
Q509	F-6
Q511	F-1
Q600	D-12
Q601	F-11
Q602	I-7
Q603	I-7
Q604	H-6
Q605	E-12
Q606	F-11
Q607	H-13
Q608	D-12
Q901	H-13
Q902	I-13

DIODE

D001	B-8
D002	B-9
D003	C-9
D004	D-8
D005	C-8
D006	A-3
D007	B-8
D008	B-8
D009	B-8
D010	D-10
D011	C-8
D100	B-4
D203	C-11
D300	A-9
D301	B-9
D303	B-5
D304	B-5
D305	B-5
D306	C-5
D307	C-5
D308	B-5
D309	D-5
D311	C-5
D312	C-5
D313	A-8
D314	A-9
D315	B-7
D316	B-7
D317	B-9
D319	B-6
D320	C-5
D321	B-6
D322	B-6
D401	C-2
D402	D-2
D403	C-2
D404	C-2
D405	B-1
D406	B-1
D407	C-2
D408	B-1
D409	A-1
D504	D-5
D505	H-6
D506	F-6
D507	F-6
D508	I-6
D509	F-6
D510	F-5
D511	F-5
D512	G-5
D513	I-5
D517	F-2
D518	F-2
D519	F-2
D520	E-5
D521	I-4
D522	J-4
D523	H-4
D525	F-5
D526	F-6
D527	F-3
D528	F-3
D529	F-5
D531	E-6
D532	E-5
D533	D-2
D534	E-6
D600	G-13
D601	I-8
D602	G-13
D603	F-11
D604	J-7
D605	G-10
D606	F-11
D607	F-10
D608	F-11
D609	H-8
D610	J-8
D611	I-7
D612	F-8
D613	I-7
D615	F-7
D616	E-9
D617	F-8
D618	F-9
D620	D-8
D621	F-9
D622	F-7
D623	F-12
D624	E-12
D625	D-12
D627	F-8
D628	G-5
D629	E-9
D630	E-9
D631	G-12
D632	F-12
D633	E-12
D634	F-11
D635	E-12
D636	D-12
D637	F-11
D638	E-11
D639	D-12
D901	C-13
D902	C-13
D903	C-13
D904	D-13
D905	F-13
D906	I-13

KV-XJ29N90
RM-915

PRINTED WIRING BOARDS

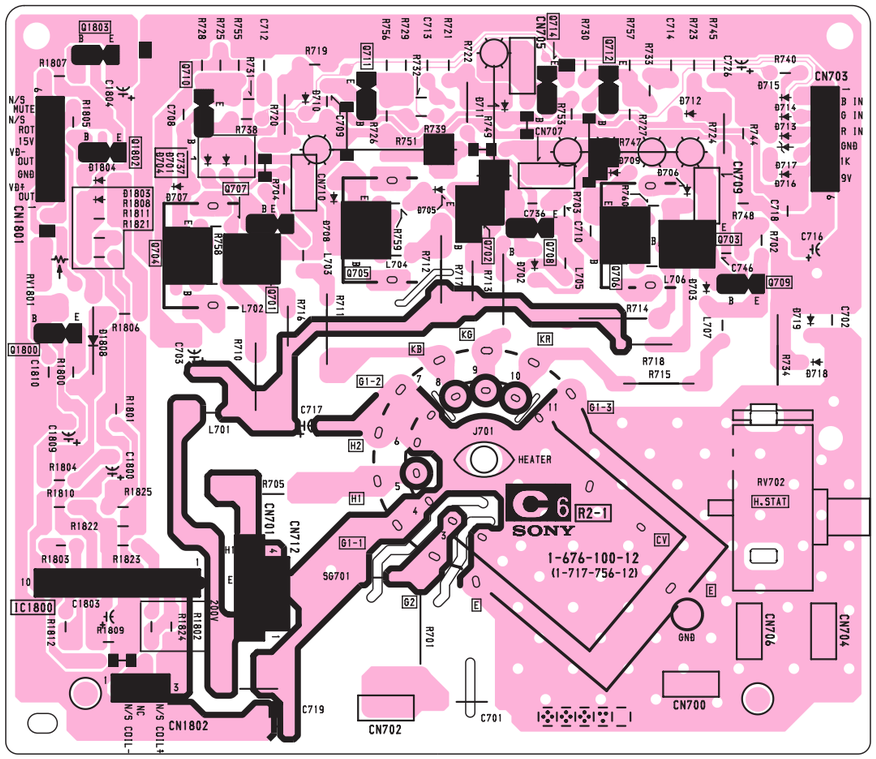
C6 [RGB OUT, PICTURE ROTATION]

H5 [CONTROL PANEL]

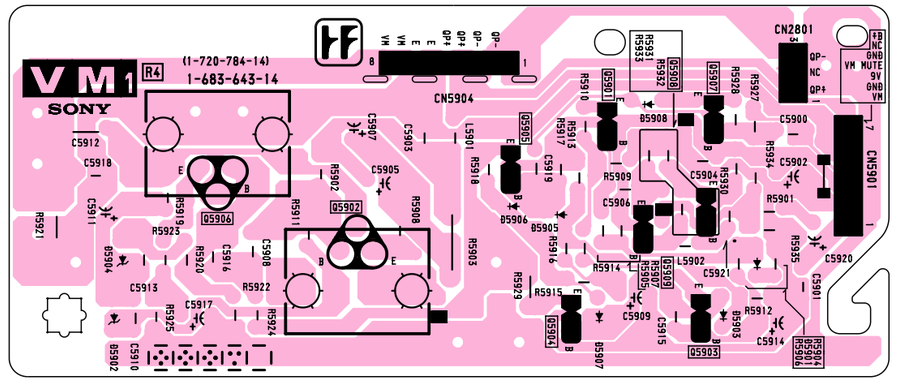
VM1 [VELOCITY MODULATION]

J4 [DVD, 3D TERMINAL]

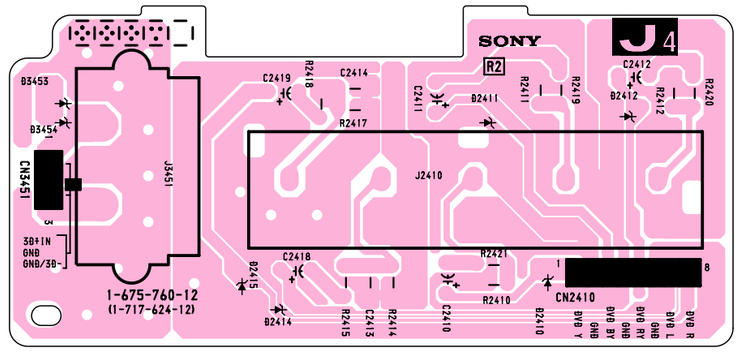
– C6 Board –



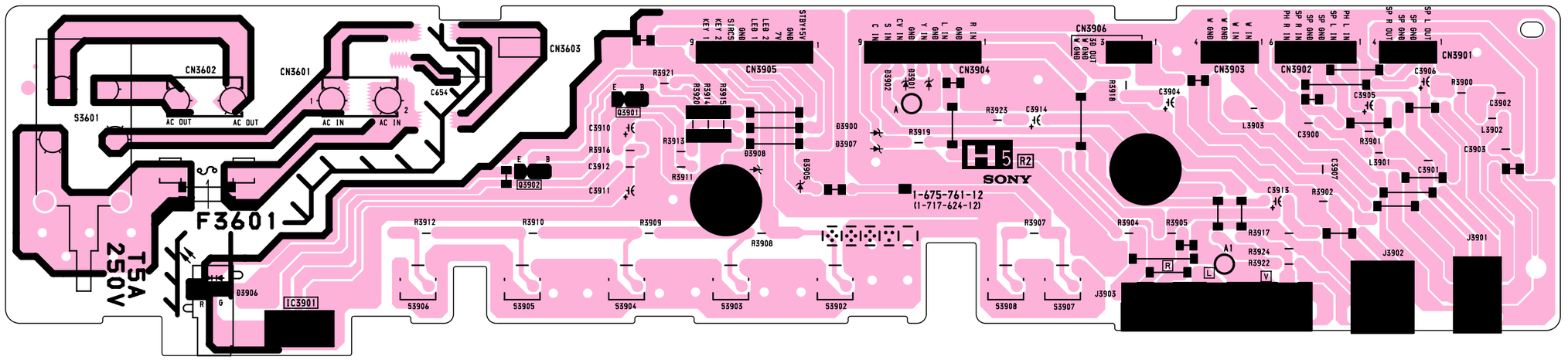
– VM1 Board –



– J4 Board –

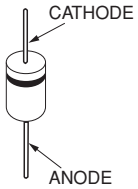
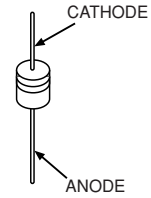
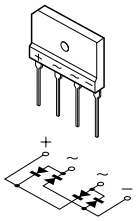
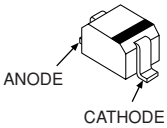
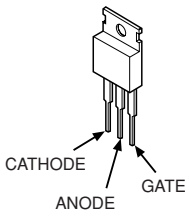


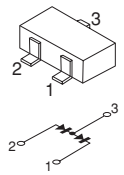
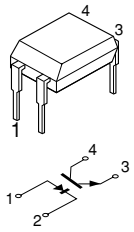
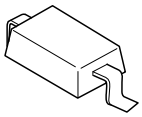
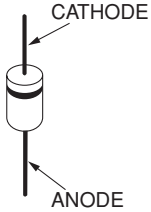
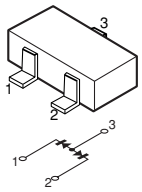
– H5 Board –



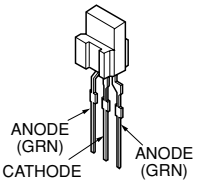
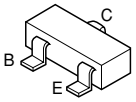
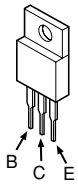
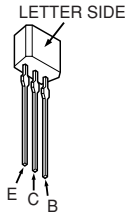
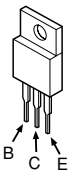
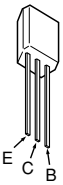
5-7. SEMICONDUCTORS

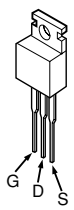
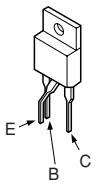
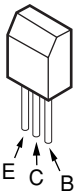
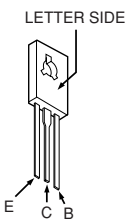
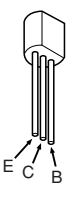
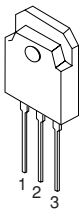
DIODE

					
AK04V0 AU-01Z-V1 D2L20U EL1Z ERA22-08 ERC04-06SE GP08D	NNCD9.1A-T1 RD33EB3T RGP02-17EL-6433	D1NS4 D1N20R RD6.8ES-B1 RD20ES-B2 RD30ESB2 RD39ES-B2 1SS119-25 HZS9.1NB2	D3SB60	RD5.1SB-T2 RD7.5SB1-T1 RD9.1S-B RD10S-B 1SS355TE-17	5P6M

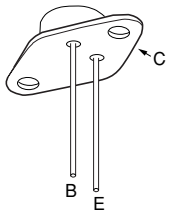
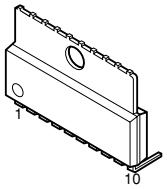
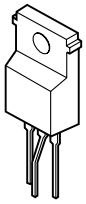
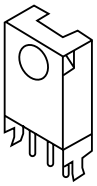
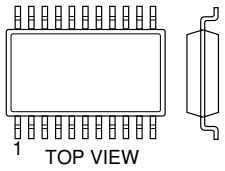
					
DA204K	ON3171-R	RN4Z	MM3Z15VT1	RU4AM-T4 31DQ06-FC5	1SS302

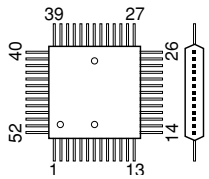
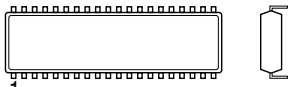
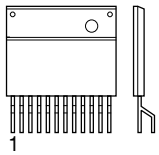
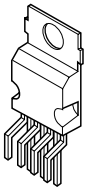
LED TRANSISTOR

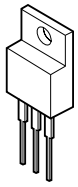
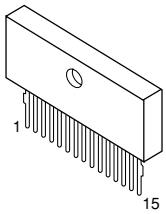
					
SPB-26MVWF	MSD601-RT1 UN2111 UN2213 UN2216 2SA1162-G 2SD2114K	2SC4793	DTC144ESA 2SA1175-HFE 2SC2785-HFE	2SA1606-E 2SC4159-E	2SC2458-YGR 2SC3576

					
IRF614	2SK2845-LB102	2SC2958	2SC2611 2SC2688-LK	2SA1091-0 2SC2551-0	KIA7805API KIA7809API

TRANSISTOR IC

				 Small outline L-leaded Pin 8~98
2SD2578-CA	LA6510	SE-135N	SBX3081-21	LM358D (8PIN) MC145053BF MM1319AFBE (7PIN) NJM2903M (8PIN) UPC4558G2 (8PIN)

MARKING SIDE VIEW 	 Dual In-line Package Pin 6~98	MARKING SIDE VIEW  Zig-zag In -line Package Pin 6~99	
RU-1P	CXA2159S CXP86461-634S (64PIN) M24C08-BN6 (8PIN) TDA7429S (15PIN) TDA9183T	STR-F6456S	TDA8172

	
NJM78M09FA	TA8223K

SECTION 6
EXPLODED VIEWS

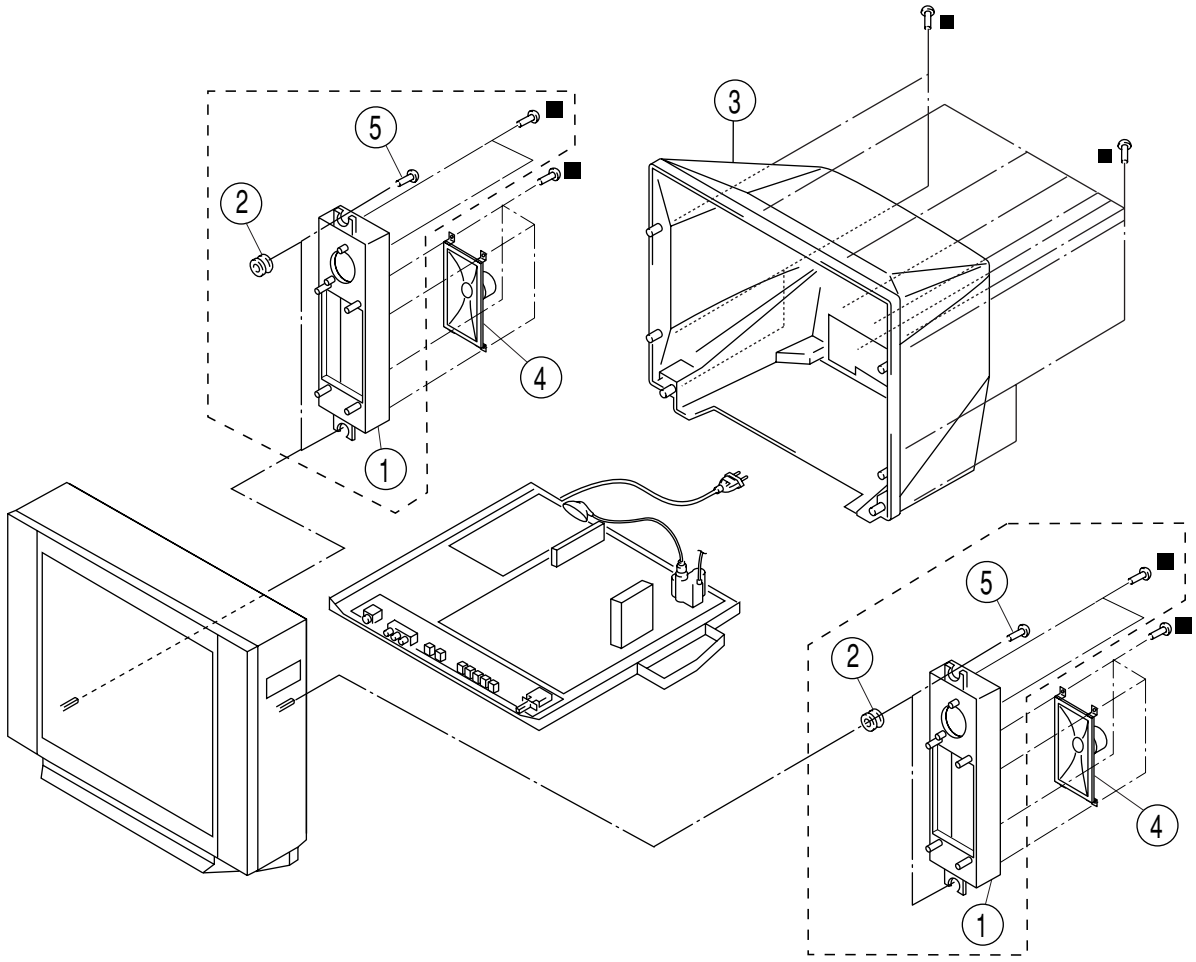
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

6-1. SPEAKER BRACKET

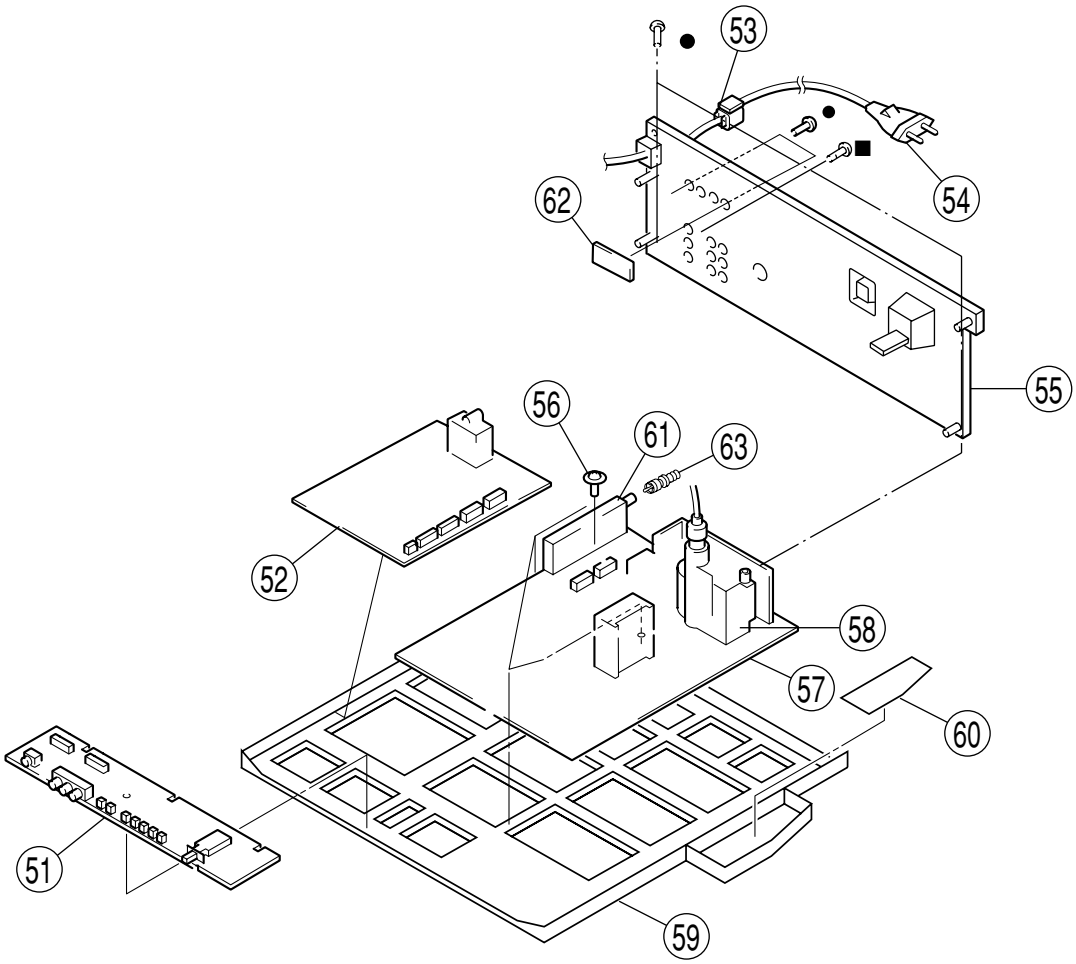
■: 7-685-663-71 SCREW +BVTP 4 × 16



REF. NO.		PART NO.	DESCRIPTION	REMARK
1	*	4-070-757-11	BRACKET SPEAKER	REFER PAGE 68 NO 101
2		4-374-745-21	CUSHION(A)	REFER PAGE 68 NO 101
3		4-065-506-12	COVER REAR	(■ 11 SCREWS)
4		1-825-028-11	SPEAKER (15 X 6.5 CM)	
5		4-058-870-01	SCREW (4 X 16)W(+) P TAPPING	

6-2. CHASSIS

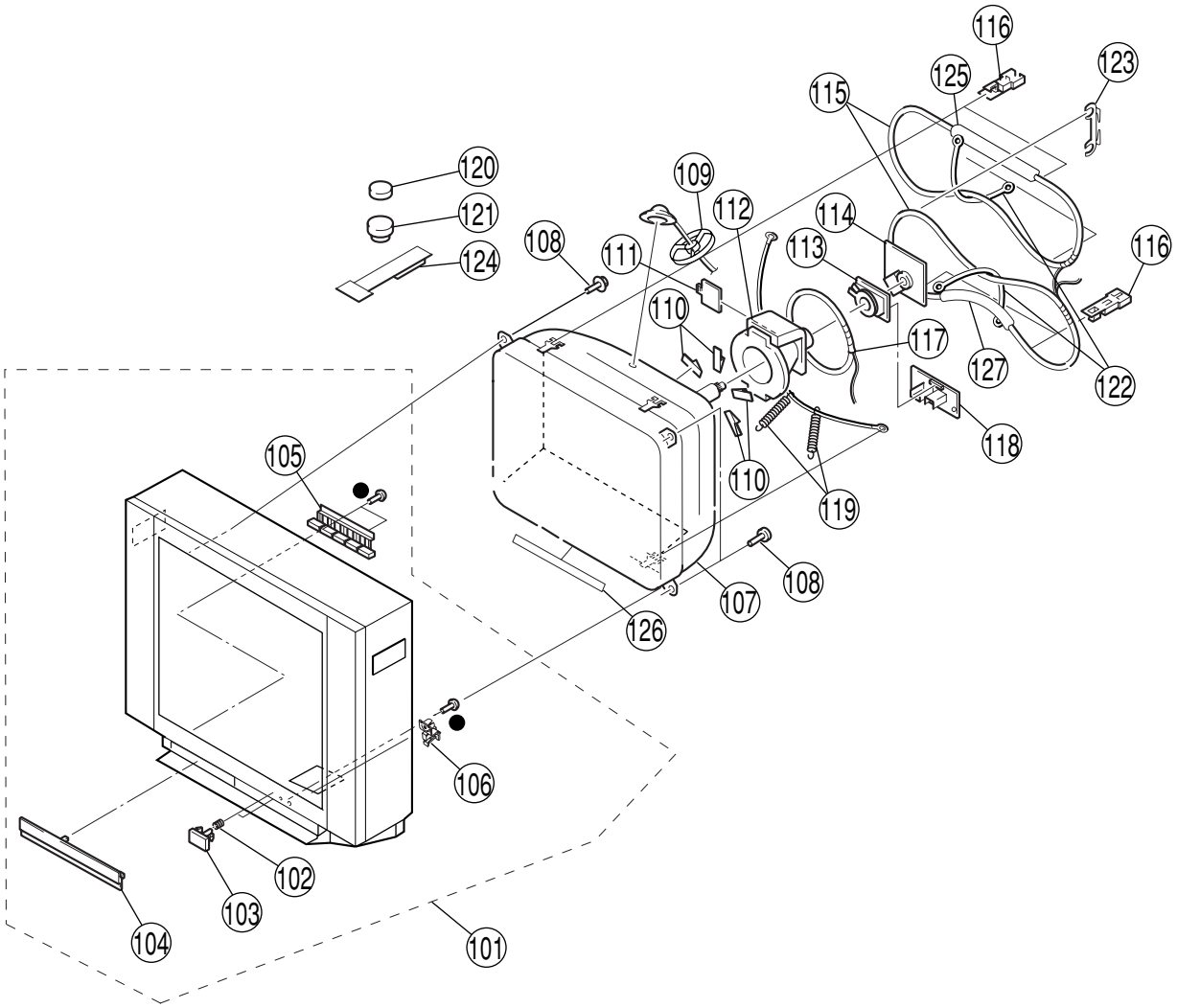
●: 7-685-648-79 SCREW BVTP 3 × 12
■: 7-685-663-71 SCREW BVTP 4 × 16



REF. NO.		PART NO.	DESCRIPTION	REMARK
51	*	A-1401-858-A	H5 BOARD MOUNTED	
52	*	A-1300-881-A	B9 BOARD COMPLETE	
53		4-022-115-00	HOLDER, AC CORD	
54	⚠	1-790-130-31	CORD, POWER (WITH CONNECTOR)	
55	*	4-081-023-23	BRACKET, TERMINAL	
56		4-046-797-01	SCREW (3X12), (+)BVTAP	
57	*	A-1300-879-A	A BOARD COMPLETE	
58	⚠	1-453-284-11	TRANSFORMER ASSY, FLYBACK (NX-4009//M314)	
59	*	4-066-681-05	BRACKET, MAIN (FIVE SCREWS (3X12), (+) BVTAP)	
60	*	A-1400-167-A	D3 BOARD MOUNTED	
61		8-598-593-20	TUNER, FSS BTF-WA-421	
62	*	A-1388-338-A	J4 BOARD MOUNTED	
63		1-573-657-21	PLUG F-PIN	

6-3. PICTURE TUBE

●: 7-685-648-79 SCREW BVTP 3 × 12



REF. NO.		PART NO.	DESCRIPTION	REMARK
101		X-4040-908-1	BEZNET ASSY	102 - 105
102		4-036-405-11	SPRING, COMPRESSION	
103		4-070-752-02	BUTTON, POWER	
104		4-088-849-21	DOOR, CONTROL	
105		4-070-753-12	BUTTON, MULTI	
106	*	4-070-755-01	BAR OPTICAL	
107	⚠	8-735-057-05	PICTURE TUBE (A68LNH070X)	
108		4-046-765-12	SCREW, TAPPING 7+CROWN WASHER	
109	*	3-704-372-11	HOLDER, HV CABLE	
110		4-046-600-11	SPACER, DY	
111		4-077-228-02	PIECE, TLH CONVENGENCE	
112	⚠	8-451-494-31	DEFLECTION YOKE (Y29RSA-S)	
113		8-453-011-41	NA299-C	
114	*	A-1332-152-A	C6 BOARD MOUNTED	
115	⚠	1-419-164-11	COIL, DEGAUSING	

REF. NO.		PART NO.	DESCRIPTION	REMARK
116	*	4-062-970-12	CLIP (29RSN), DGC	
117		1-452-896-11	COIL, NA ROTATION (RT200)	
118	*	A-1400-168-A	VM1 BOARD MOUNTED	
119		4-369-318-61	SPRING, TENSION	
120		1-452-032-00	MAGNET,DISC	
121		1-452-094-00	CIRCULAR DISC MAGNET B	
122		4-079-376-01	BAND, DGC	
123		4-064-883-03	HOLDER, DGC	
124		X-4387-214-3	PERMALOY ASSY, CORRECTION	
125		4-063-935-21	CUSHION (50 X 550) DGC	
126		4-072-569-11	SHEET BLOTTING	

SECTION 7
ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All resistors are in ohms
- F : nonflammable

CAPACITORS
- MF : µF, PF : µµF

COILS
- MMH : mH, UH : µH

REF NO.	PART NO.	DESCRIPTION			
	* A-1300-879-A	A BOARD COMPLETE			
		**********			
	* 4-374-846-01	COVER, CAPACITOR, CAP TYPE			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
	4-382-854-21	SCREW (M3X14), P, SW (+)			
		<CAPACITOR>			
C004	1-162-960-11	CERAMIC CHIP	220PF	10.00%	50V
C005	1-162-960-11	CERAMIC CHIP	220PF	10.00%	50V
C006	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C007	1-126-947-11	ELECT	47UF	20.00%	16V
C013	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C014	1-126-947-11	ELECT	47UF	20.00%	25V
C015	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C016	1-163-243-11	CERAMIC CHIP	47PF	5.00%	50V
C017	1-162-925-11	CERAMIC CHIP	68PF	5.00%	50V
C019	1-126-947-11	ELECT	47UF	20.00%	25V
C022	1-162-915-11	CERAMIC CHIP	10PF	0.50PF	50V
C023	1-162-915-11	CERAMIC CHIP	10PF	0.50PF	50V
C024	1-162-915-11	CERAMIC CHIP	10PF	0.50PF	50V
C026	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C027	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C028	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C030	1-126-965-91	ELECT	22UF	20.00%	50V
C031	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C032	1-107-823-11	CERAMIC CHIP	0.47UF	10.00%	16V
C041	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C042	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C044	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C047	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C055	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C101	1-126-964-11	ELECT	10UF	20.00%	50V
C103	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C104	1-104-665-11	ELECT	100UF	20.00%	10V
C106	1-163-035-00	CERAMIC CHIP	0.047UF		50V
C107	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V
C108	1-126-947-11	ELECT	47UF	20.00%	16V
C109	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V
C110	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V
C111	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V
C112	1-126-947-11	ELECT	47UF	20.00%	16V
C113	1-126-947-11	ELECT	47UF	20.00%	25V
C114	1-126-967-11	ELECT	47UF	20.00%	50V
C202	1-115-185-11	CERAMIC CHIP	0.033UF	10.00%	50V
C203	1-115-185-11	CERAMIC CHIP	0.033UF	10.00%	50V
C204	1-136-161-00	FILM	0.047UF	5.00%	50V
C205	1-164-161-11	CERAMIC CHIP	0.0022UF	10.00%	50V
C206	1-164-161-11	CERAMIC CHIP	0.0022UF	10.00%	50V
C207	1-136-161-00	FILM	0.047UF	5.00%	50V
C208	1-126-965-91	ELECT	22UF	20.00%	50V

REF NO.	PART NO.	DESCRIPTION			
C209	1-126-965-91	ELECT	22UF	20.00%	50V
C210	1-126-933-11	ELECT	100UF	20.00%	16V
C211	1-126-941-11	ELECT	470UF	20.00%	25V
C212	1-126-933-11	ELECT	100UF	20.00%	16V
C213	1-126-933-11	ELECT	100UF	20.00%	16V
C214	1-126-942-61	ELECT	1000UF	20.00%	25V
C215	1-126-942-61	ELECT	1000UF	20.00%	25V
C216	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C217	1-126-964-11	ELECT	10UF	20.00%	50V
C218	1-136-167-00	FILM	0.15UF	5.00%	50V
C219	1-136-167-00	FILM	0.15UF	5.00%	50V
C220	1-126-942-61	ELECT	1000UF	20.00%	25V
C221	1-126-964-11	ELECT	10UF	20.00%	50V
C223	1-126-965-91	ELECT	22UF	20.00%	50V
C224	1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C225	1-109-982-11	CERAMIC CHIP	1UF	10.00%	10V
C226	1-109-982-11	CERAMIC CHIP	1UF	10.00%	10V
C264	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C265	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C301	1-126-935-11	ELECT	470UF	20.00%	16V
C302	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V
C303	1-126-964-11	ELECT	10UF	20.00%	50V
C304	1-126-967-11	ELECT	47UF	20.00%	50V
C305	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C306	1-162-918-11	CERAMIC CHIP	18PF	5.00%	50V
C307	1-162-918-11	CERAMIC CHIP	18PF	5.00%	50V
C308	1-163-259-91	CERAMIC CHIP	220PF	5.00%	50V
C309	1-137-378-11	MYLAR	0.22UF	5.00%	50V
C310	1-126-963-11	ELECT	4.7UF	20.00%	50V
C311	1-126-964-11	ELECT	10UF	20.00%	50V
C312	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C313	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C316	1-126-934-11	ELECT	220UF	20.00%	16V
C317	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C318	1-162-974-11	CERAMIC CHIP	0.01UF		50V
C319	1-162-974-11	CERAMIC CHIP	0.01UF		50V
C320	1-162-974-11	CERAMIC CHIP	0.01UF		50V
C322	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V
C324	1-162-968-11	CERAMIC CHIP	0.0047UF	10.00%	50V
C325	1-126-960-11	ELECT	1UF	20.00%	50V
C327	1-126-965-91	ELECT	22UF	20.00%	50V
C328	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C329	1-126-965-91	ELECT	22UF	20.00%	50V
C330	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C331	1-126-963-11	ELECT	4.7UF	20.00%	50V
C332	1-126-963-11	ELECT	4.7UF	20.00%	50V
C335	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C336	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C337	1-126-961-11	ELECT	2.2UF	20.00%	50V
C341	1-115-340-11	CERAMIC CHIP	0.22UF	10.00%	25V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF NO.	PART NO.	DESCRIPTION		REMARK	
C342	1-163-259-91	CERAMIC CHIP	220PF	5.00%	50V
C347	1-126-933-11	ELECT	100UF	20.00%	16V
C348	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C349	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C350	1-216-295-91	SHORT CHIP	0		
C351	1-126-964-11	ELECT	10UF	20.00%	50V
C352	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C353	1-126-960-11	ELECT	1UF	20.00%	50V
C356	1-126-960-11	ELECT	1UF	20.00%	50V
C357	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C502	1-163-145-00	CERAMIC CHIP	0.0015UF	5.00%	50V
C503	1-126-964-11	ELECT	10UF	20.00%	50V
C506	1-107-638-11	ELECT	33UF	20.00%	160V
C507	1-161-830-00	CERAMIC	0.0047UF		500V
C510	1-102-112-00	CERAMIC	330PF	10.00%	50V
C512	1-163-989-11	CERAMIC CHIP	0.033UF	10.00%	25V
C513	1-163-263-11	CERAMIC CHIP	330PF	5.00%	50V
C514	1-106-383-00	MYLAR	0.047UF	10.00%	200V
C517	1-162-967-11	CERAMIC CHIP	0.0033UF	10.00%	50V
C518	1-104-665-11	ELECT	100UF	20.00%	10V
C519	1-102-212-00	CERAMIC	820PF	10.00%	500V
C521	1-126-934-11	ELECT	220UF	20.00%	16V
C522	1-126-933-11	ELECT	100UF	20.00%	16V
C523	1-102-002-00	CERAMIC	680PF	10.00%	500V
C524	1-126-967-11	ELECT	47UF	20.00%	50V
C526	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C527	1-102-820-00	CERAMIC	330PF	5.00%	50V
C528	1-162-116-00	CERAMIC	680PF	10.00%	2KV
C530	1-137-372-11	MYLAR	0.022UF	5.00%	50V
C531	1-107-903-11	ELECT	2.2UF	20.00%	50V
C532	1-126-941-11	ELECT	470UF	20.00%	25V
C533	1-126-941-11	ELECT	470UF	20.00%	25V
C534	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C536	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C537	1-126-969-11	ELECT	220UF	20.00%	50V
C538	1-127-717-11	FILM	19000PF	3%	1.2KV
C539	1-129-723-00	FILM	0.056UF	5.00%	630V
C540	1-136-171-00	FILM	0.33UF	5.00%	50V
C546	1-165-319-11	CERAMIC CHIP	0.1UF		50V
C549	1-162-968-11	CERAMIC CHIP	0.0047UF	10.00%	50V
C550	1-106-220-00	MYLAR	0.1UF	10.00%	100V
C551	1-126-960-11	ELECT	1UF	20.00%	50V
C552	1-162-116-00	CERAMIC	680PF	10.00%	2KV
C553	1-162-116-00	CERAMIC	680PF	10.00%	2KV
C554	1-137-417-11	MYLAR	0.0047UF	10.00%	200V
C556	1-126-941-11	ELECT	470UF	20.00%	25V
C557	1-126-941-11	ELECT	470UF	20.00%	25V
C558	1-123-024-21	ELECT	33UF		160V
C560	1-102-228-00	CERAMIC	470PF	10.00%	500V
C561	1-129-898-00	FILM	0.0022UF	5.00%	630V
C562	1-102-228-00	CERAMIC	470PF	10.00%	500V
C564	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C565	1-107-655-11	ELECT	47UF	20.00%	250V
C566	1-102-244-00	CERAMIC	220PF	10.00%	500V
C567	1-115-520-11	FILM	0.68UF	5.00%	250V
C568	1-102-228-00	CERAMIC	470PF	10.00%	500V
C570	1-115-522-11	FILM	1UF	5.00%	250V
C572	1-117-661-21	FILM	0.15UF	5.00%	250V
C573	1-106-387-00	MYLAR	0.068UF	10.00%	200V
C574	1-104-709-11	ELECT	4.7UF		160V
C576	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C577	1-106-395-00	MYLAR	0.15UF	10.00%	200V

REF NO.		PART NO.	DESCRIPTION		REMARK	
C582		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C584		1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C586		1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C600	⚠	1-115-165-11	MYLAR	0.1UF	20.00%	250V
C602	⚠	1-115-165-11	MYLAR	0.1UF	20.00%	250V
C603		1-249-429-11	CARBON	10K	5%	1/4W
C604		1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C605	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C606	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C607		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C608		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C609		1-126-968-11	ELECT	100UF	20.00%	50V
C610		1-126-964-11	ELECT	10UF	20.00%	50V
C611		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C612		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C613		1-113-611-11	ELECT(BLOCK)	820UF	20.00%	250V
C614		1-126-964-11	ELECT	10UF	20.00%	50V
C615	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C618		1-125-893-11	FILM	680PF	3.00%	1.5KV
C619	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C620		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C621		1-102-114-00	CERAMIC	470PF	10.00%	50V
C622		1-102-074-00	CERAMIC	0.001UF	10.00%	50V
C623		1-104-665-11	ELECT	100UF	20.00%	25V
C624		1-125-772-91	CERAMIC	1500PF	10.00%	2KV
C625		1-102-002-00	CERAMIC	680PF	10.00%	500V
C626		1-102-002-00	CERAMIC	680PF	10.00%	500V
C628		1-126-942-61	ELECT	1000UF	20.00%	25V
C629		1-126-964-11	ELECT	10UF	20.00%	50V
C630		1-125-494-11	ELECT(BLOCK)	560UF	20.00%	160V
C632		1-128-339-11	ELECT	2200UF	20.00%	16V
C633		1-104-999-11	MYLAR	0.1UF	10.00%	200V
C634		1-126-933-11	ELECT	100UF	20.00%	16V
C635		1-104-665-11	ELECT	100UF	20.00%	10V
C636		1-104-760-11	CERAMIC CHIP	0.047UF	10.00%	50V
C641		1-102-002-00	CERAMIC	680PF	10.00%	500V
C642		1-126-943-11	ELECT	2200UF	20.00%	25V
C643		1-104-665-11	ELECT	100UF	20.00%	10V
C644		1-104-331-11	CERAMIC	0.0022UF	10.00%	1KV
C645		1-137-605-11	MYLAR	0.01UF	10.00%	250V
C646		1-107-679-91	ELECT	10UF	20.00%	450V
C647		1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
C649		1-126-940-11	ELECT	330UF	20.00%	25V
C650		1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
C651		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C652		1-126-965-91	ELECT	22UF	20.00%	50V
C653		1-126-947-11	ELECT	47UF	20.00%	25V
C655	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C657		1-101-821-00	CERAMIC	0.0022UF		500V
C901		1-136-153-00	FILM	0.01UF	5.00%	50V
C902		1-136-153-00	FILM	0.01UF	5.00%	50V
C912		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C913		1-104-665-11	ELECT	100UF	20.00%	10V

<CONNECTOR>

CN101	*	1-764-333-11	PLUG, CONNECTOR 10P
CN102	*	1-564-507-11	PLUG, CONNECTOR 4P
CN104		1-695-915-11	TAB (CONTACT)
CN106	*	1-564-506-11	PLUG, CONNECTOR 3P
CN202	*	1-508-847-00	PIN, CONNECTOR 4P

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REF NO.		PART NO.	DESCRIPTION	REMARK
CN205	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
CN305	*	1-564-509-11	PLUG, CONNECTOR 6P	
CN501	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
CN502	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
CN503	*	1-564-510-11	PLUG, CONNECTOR 7P	
CN504		1-695-915-11	TAB (CONTACT)	
CN505	*	1-564-508-11	PLUG, CONNECTOR 5P	
CN507	*	1-564-509-11	PLUG, CONNECTOR 6P	
CN601	*	1-580-843-11	PIN, CONNECTOR (POWER)	
CN602	*	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
CN603	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
CN604	*	1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
CN901	*	1-564-509-11	PLUG, CONNECTOR 6P	
CN904	*	1-564-512-11	PLUG, CONNECTOR 9P	
			<DIODE>	
D001		8-719-988-61	1SS355TE-17	
D005		8-719-988-61	1SS355TE-17	
D006		8-719-988-61	1SS355TE-17	
D203		8-719-820-41	1SS302	
D300		1-216-295-91	SHORT CHIP 0	
D301		8-719-988-61	1SS355TE-17	
D306		8-719-988-61	1SS355TE-17	
D307		8-719-988-61	1SS355TE-17	
D308		8-719-988-61	1SS355TE-17	
D309		8-719-159-10	RD5.1SB-T2	
D311		8-719-988-61	1SS355TE-17	
D312		8-719-988-61	1SS355TE-17	
D313		8-719-988-61	1SS355TE-17	
D314		8-719-988-61	1SS355TE-17	
D315		8-719-988-61	1SS355TE-17	
D316		8-719-037-06	RD7.5SB1-T1	
D320		8-719-158-35	RD9.1S-B	
D321		8-719-158-35	RD9.1S-B	
D504		8-719-302-43	EL1Z	
D505		8-719-988-61	1SS355TE-17	
D506		8-719-911-19	1SS119-25	
D507		8-719-988-61	1SS355TE-17	
D508		8-719-988-61	1SS355TE-17	
D509		1-216-073-91	RES-CHIP 10K 5% 1/10W	
D510		8-719-988-61	1SS355TE-17	
D511		8-719-988-61	1SS355TE-17	
D512		8-719-988-61	1SS355TE-17	
D513		8-719-908-03	GP08D	
D517		8-719-081-00	DIODE BY228/A52A/	
D518		8-719-074-35	RU4AM-T4	
D519		8-719-081-00	DIODE BY228/A52A/	
D521		8-719-302-43	EL1Z	
D522		8-719-028-45	D2L20U	
D523		8-719-302-43	EL1Z	
D527		8-719-908-03	GP08D	
D528		8-719-908-03	GP08D	
D532		8-719-988-61	1SS355TE-17	
D534		8-719-988-61	1SS355TE-17	
D600		8-719-911-19	1SS119-25	
D602		8-719-911-19	1SS119-25	
D603		8-719-150-92	RD33EB3T	
D604		8-719-028-72	RGP02-17EL-6433	
D605		8-719-510-22	D3SB60	
D606		8-719-108-18	5P-6M	
D607		8-719-988-61	1SS355TE-17	

REF NO.	PART NO.	DESCRIPTION	REMARK
D608	8-719-110-53	RD20ES-B2	
D610	8-719-043-76	AK04V0	
D611	8-719-046-74	AU-01Z-V1	
D613	8-719-046-74	AU-01Z-V1	
D614	8-719-046-74	AU-01Z-V1	
D615	8-719-074-35	RU4AM-T4	
D616	8-719-067-18	RN4Z	
D617	8-719-073-84	31DQ06-FC5	
D620	8-719-110-72	RD30ESB2	
D623	8-719-082-03	DIODE MM3Z15VT1	
D624	8-719-988-61	1SS355TE-17	
D625	8-719-158-39	RD10S-B	
D627	8-719-073-84	31DQ06-FC5	
D628	8-719-911-19	1SS119-25	
D631	8-719-068-00	ERC04-06SE	
D632	8-719-068-00	ERC04-06SE	
D633	8-719-948-45	ERA22-08	
D634	8-719-988-61	1SS355TE-17	
D635	8-719-988-61	1SS355TE-17	
D636	8-719-510-02	D1NS4	
D637	8-719-109-96	RD6.8ES-B1	
D638	8-719-510-48	D1N20R	
		<CONNECTOR>	
DY1	*1-580-798-11	CONNECTOR PIN (DY) 6P	
		<FERRITE BEAD>	
FB300	1-410-397-21	FERRITE 1.1UH	
FB501	1-410-397-21	FERRITE 1.1UH	
FB502	1-410-397-21	FERRITE 1.1UH	
FB600	1-410-397-21	FERRITE 1.1UH	
FB601	1-410-397-21	FERRITE 1.1UH	
FB602	1-410-397-21	FERRITE 1.1UH	
FB603	1-410-397-21	FERRITE 1.1UH	
FB604	1-412-911-31	FERRITE 0UH	
FB605	1-406-656-21	INDUCTOR 3.3UH	
FB606	1-412-911-31	FERRITE 0UH	
FB608	1-412-911-31	FERRITE 0UH	
FB611	1-410-397-21	FERRITE 1.1UH	
FB612	1-410-397-21	FERRITE 1.1UH	
FB613	1-412-911-11	FERRITE 0UH	
FB615	1-412-911-31	FERRITE 0UH	
		<IC>	
IC001	8-752-931-48	IC CXP86461-643S	
IC002	8-759-371-21	MM1319AFBE	
IC003	8-759-672-78	M24C08-BN6(A)	
IC201	8-759-336-30	TA8223K	
IC301	8-752-095-72	CXA2159S	
IC302	8-759-672-27	TDA9183T	
IC502	8-759-700-07	NJM2903M	
IC503	8-759-980-58	TDA8172	
IC601	8-749-019-09	IC STR-F6456S	
IC602	8-749-920-61	SE-135N	
IC603	8-759-347-18	KIA7809PI	
IC604	8-759-646-52	KIA7805API	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

A

REF NO.	PART NO.	DESCRIPTION		REMARK
		<CHIP CONDUCTOR>		
JR001	1-216-295-91	SHORT CHIP	0	
JR002	1-216-295-91	SHORT CHIP	0	
JR003	1-216-295-91	SHORT CHIP	0	
JR004	1-216-295-91	SHORT CHIP	0	
JR006	1-216-295-91	SHORT CHIP	0	
JR007	1-216-295-91	SHORT CHIP	0	
JR008	1-216-295-91	SHORT CHIP	0	
JR010	1-216-295-91	SHORT CHIP	0	
JR012	1-216-295-91	SHORT CHIP	0	
JR014	1-216-295-91	SHORT CHIP	0	
JR015	1-216-295-91	SHORT CHIP	0	
JR016	1-216-295-91	SHORT CHIP	0	
JR019	1-216-295-91	SHORT CHIP	0	
JR020	1-216-295-91	SHORT CHIP	0	
JR022	1-216-295-91	SHORT CHIP	0	
JR023	1-216-295-91	SHORT CHIP	0	
JR024	1-216-295-91	SHORT CHIP	0	
JR025	1-216-295-91	SHORT CHIP	0	
JR028	1-216-295-91	SHORT CHIP	0	
JR107	1-216-295-91	SHORT CHIP	0	
JR108	1-216-295-91	SHORT CHIP	0	
JR111	1-216-295-91	SHORT CHIP	0	
JR202	1-216-295-91	SHORT CHIP	0	
JR204	1-216-295-91	SHORT CHIP	0	
JR214	1-216-295-91	SHORT CHIP	0	
JR300	1-216-295-91	SHORT CHIP	0	
JR304	1-216-295-91	SHORT CHIP	0	
JR308	1-216-295-91	SHORT CHIP	0	
JR311	1-216-295-91	SHORT CHIP	0	
JR312	1-216-295-91	SHORT CHIP	0	
JR400	1-216-295-91	SHORT CHIP	0	
JR500	1-216-295-91	SHORT CHIP	0	
JR501	1-216-295-91	SHORT CHIP	0	
JR502	1-216-295-91	SHORT CHIP	0	
JR503	1-216-295-91	SHORT CHIP	0	
JR505	1-216-295-91	SHORT CHIP	0	
JR600	1-216-295-91	SHORT CHIP	0	
		<COIL>		
L002	1-414-856-11	INDUCTOR	10UH	
L003	1-414-180-11	INDUCTOR	3.3UH	
L005	1-414-233-22	FERRITE	0UH	
L101	1-414-856-11	INDUCTOR	10UH	
L102	1-414-856-11	INDUCTOR	10UH	
L103	1-414-856-11	INDUCTOR	10UH	
L104	1-414-856-11	INDUCTOR	10UH	
L105	1-414-856-11	INDUCTOR	10UH	
L301	1-414-189-31	INDUCTOR	100UH	
L302	1-414-185-41	INDUCTOR	22UH	
L303	1-414-189-31	INDUCTOR	100UH	
L304	1-414-189-31	INDUCTOR	100UH	
L501	1-412-525-31	INDUCTOR	10UH	
L502	1-422-613-11	COIL, AIR CORE		
L503	1-412-525-31	INDUCTOR	10UH	
L504	1-412-525-31	INDUCTOR	10UH	
L507	1-459-111-00	INDUCTOR	10MH	
L511	1-406-977-71	INDUCTOR	0UH	
L513	1-412-551-31	INDUCTOR	1.5MH	
L515	1-459-104-00	COIL, WITH CORE		
L518	1-414-187-11	INDUCTOR	47UH	
L601	1-406-663-21	INDUCTOR	47UH	
L901	1-408-603-31	INDUCTOR	10UH	
L902	1-408-603-31	INDUCTOR	10UH	
L905	1-414-856-11	INDUCTOR	10UH	
		<PHOTO COUPLER>		
PH600	⚠ 8-749-924-35	ON3171-R		
		<IC LINK>		
PS200	1-532-686-21	LINK, IC 2.7A/150V		
PS600	1-533-597-41	LINK, IC		
PS601	1-533-597-41	LINK, IC		
		<TRANSISTOR>		
Q002	8-729-010-25	MSD601-RT1		
Q101	8-729-010-25	MSD601-RT1		
Q201	8-729-424-67	UN2216		
Q202	8-729-424-67	UN2216		
Q205	8-729-421-19	UN2213		
Q206	8-729-421-19	UN2213		
Q207	8-729-421-19	UN2213		
Q301	8-729-216-22	2SA1162-G		
Q302	8-729-010-25	MSD601-RT1		
Q303	8-729-216-22	2SA1162-G		
Q305	8-729-216-22	2SA1162-G		
Q306	8-729-010-25	MSD601-RT1		
Q307	8-729-010-25	MSD601-RT1		
Q308	8-729-216-22	2SA1162-G		
Q312	8-729-216-22	2SA1162-G		
Q313	8-729-010-25	MSD601-RT1		
Q314	8-729-216-22	2SA1162-G		
Q315	8-729-421-19	UN2213		
Q501	8-729-216-22	2SA1162-G		
Q502	8-729-216-22	2SA1162-G		
Q503	8-729-010-25	MSD601-RT1		
Q505	8-729-931-45	IRF614		
Q506	8-729-119-80	2SC2688-LK		
Q507	8-729-216-22	2SA1162-G		
Q509	8-729-010-25	MSD601-RT1		
Q511	8-729-048-07	2SD2578-CA		
Q600	8-729-119-78	2SC2785-HFE		
Q601	8-729-023-22	2SD2114K		
Q602	8-729-010-25	MSD601-RT1		
Q603	8-729-424-08	UN2111		
Q604	8-729-200-17	2SA1091-O		
Q605	8-729-044-30	2SK2845-LB102		
Q606	8-729-010-25	MSD601-RT1		
Q607	8-729-823-22	2SC3576		
Q608	8-729-010-25	MSD601-RT1		
		<RESISTOR>		
R001	1-414-233-22	FERRITE	0UH	
R002	1-216-025-11	RES-CHIP	100	5% 1/10W
R003	1-216-073-91	RES-CHIP	10K	5% 1/10W
R004	1-216-025-11	RES-CHIP	100	5% 1/10W
R005	1-216-025-11	RES-CHIP	100	5% 1/10W

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REF NO.	PART NO.	DESCRIPTION		REMARK	
R006	1-216-689-11	RES-CHIP	39K	5%	1/10W
R007	1-216-033-00	RES-CHIP	220	5%	1/10W
R008	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R009	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R010	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R011	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R012	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R013	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R014	1-216-025-11	RES-CHIP	100	5%	1/10W
R015	1-216-025-11	RES-CHIP	100	5%	1/10W
R017	1-216-049-11	RES-CHIP	1K	5%	1/10W
R018	1-216-033-00	RES-CHIP	220	5%	1/10W
R019	1-216-073-91	RES-CHIP	10K	5%	1/10W
R020	1-216-045-00	RES-CHIP	680	5%	1/10W
R021	1-216-073-91	RES-CHIP	10K	5%	1/10W
R022	1-216-025-11	RES-CHIP	100	5%	1/10W
R024	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R025	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R026	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R027	1-216-073-91	RES-CHIP	10K	5%	1/10W
R028	1-216-049-11	RES-CHIP	1K	5%	1/10W
R029	1-216-049-11	RES-CHIP	1K	5%	1/10W
R030	1-216-025-11	RES-CHIP	100	5%	1/10W
R031	1-216-049-11	RES-CHIP	1K	5%	1/10W
R032	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R034	1-216-049-11	RES-CHIP	1K	5%	1/10W
R035	1-216-025-11	RES-CHIP	100	5%	1/10W
R036	1-216-025-11	RES-CHIP	100	5%	1/10W
R037	1-216-077-91	RES-CHIP	15K	5%	1/10W
R040	1-216-025-11	RES-CHIP	100	5%	1/10W
R041	1-216-025-11	RES-CHIP	100	5%	1/10W
R042	1-216-295-91	SHORT CHIP	0		
R043	1-216-049-11	RES-CHIP	1K	5%	1/10W
R044	1-216-025-11	RES-CHIP	100	5%	1/10W
R045	1-414-233-22	FERRITE	0UH		
R046	1-216-049-11	RES-CHIP	1K	5%	1/10W
R047	1-414-233-22	FERRITE	0UH		
R048	1-216-073-91	RES-CHIP	10K	5%	1/10W
R049	1-216-295-91	SHORT CHIP	0		
R050	1-216-073-91	RES-CHIP	10K	5%	1/10W
R053	1-216-049-11	RES-CHIP	1K	5%	1/10W
R058	1-216-295-91	SHORT CHIP	0		
R059	1-216-295-91	SHORT CHIP	0		
R060	1-216-295-91	SHORT CHIP	0		
R061	1-216-033-00	RES-CHIP	220	5%	1/10W
R062	1-216-041-00	RES-CHIP	470	5%	1/10W
R063	1-216-041-00	RES-CHIP	470	5%	1/10W
R064	1-216-041-00	RES-CHIP	470	5%	1/10W
R065	1-216-041-00	RES-CHIP	470	5%	1/10W
R066	1-216-049-11	RES-CHIP	1K	5%	1/10W
R067	1-216-049-11	RES-CHIP	1K	5%	1/10W
R068	1-216-041-00	RES-CHIP	470	5%	1/10W
R103	1-216-025-11	RES-CHIP	100	5%	1/10W
R104	1-216-025-11	RES-CHIP	100	5%	1/10W
R105	1-216-295-91	SHORT CHIP	0		
R106	1-216-049-11	RES-CHIP	1K	5%	1/10W
R109	1-216-041-00	RES-CHIP	470	5%	1/10W
R111	1-216-025-11	RES-CHIP	100	5%	1/10W
R112	1-216-025-11	RES-CHIP	100	5%	1/10W
R113	1-216-047-91	RES-CHIP	820	5%	1/10W

REF NO.	PART NO.	DESCRIPTION		REMARK	
R114	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R115	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R116	1-216-049-11	RES-CHIP	1K	5%	1/10W
R202	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R203	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R204	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R205	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R206	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R207	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R208	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R209	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R210	1-216-031-00	RES-CHIP	180	5%	1/10W
R212	1-216-031-00	RES-CHIP	180	5%	1/10W
R225	1-216-033-00	RES-CHIP	220	5%	1/10W
R226	1-216-033-00	RES-CHIP	220	5%	1/10W
R227	1-216-033-00	RES-CHIP	220	5%	1/10W
R228	1-249-389-11	CARBON	4.7	5%	1/4W
R229	1-216-073-91	RES-CHIP	10K	5%	1/10W
R230	1-216-073-91	RES-CHIP	10K	5%	1/10W
R231	1-216-295-91	SHORT CHIP	0		
R234	1-249-389-11	CARBON	4.7	5%	1/4W
R237	1-216-308-00	RES-CHIP	4.7	5%	1/10W
R301	1-216-073-91	RES-CHIP	10K	5%	1/10W
R302	1-216-295-91	SHORT CHIP	0		
R303	1-216-049-11	RES-CHIP	1K	5%	1/10W
R304	1-216-073-91	RES-CHIP	10K	5%	1/10W
R305	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R308	1-216-025-11	RES-CHIP	100	5%	1/10W
R309	1-216-025-11	RES-CHIP	100	5%	1/10W
R310	1-216-025-11	RES-CHIP	100	5%	1/10W
R311	1-216-041-00	RES-CHIP	470	5%	1/10W
R312	1-216-039-00	RES-CHIP	390	5%	1/10W
R313	1-216-037-00	RES-CHIP	330	5%	1/10W
R314	1-216-083-00	RES-CHIP	27K	5%	1/10W
R316	1-216-037-00	RES-CHIP	330	5%	1/10W
R317	1-216-091-00	RES-CHIP	56K	5%	1/10W
R318	1-216-039-00	RES-CHIP	390	5%	1/10W
R319	1-216-025-11	RES-CHIP	100	5%	1/10W
R320	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R321	1-216-073-91	RES-CHIP	10K	5%	1/10W
R322	1-216-033-00	RES-CHIP	220	5%	1/10W
R325	1-216-041-00	RES-CHIP	470	5%	1/10W
R326	1-216-295-91	SHORT CHIP	0		
R331	1-216-295-91	SHORT CHIP	0		
R332	1-216-033-00	RES-CHIP	220	5%	1/10W
R335	1-216-045-00	RES-CHIP	680	5%	1/10W
R338	1-216-037-00	RES-CHIP	330	5%	1/10W
R340	1-216-025-11	RES-CHIP	100	5%	1/10W
R345	1-216-081-00	RES-CHIP	22K	5%	1/10W
R348	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R349	1-216-073-91	RES-CHIP	10K	5%	1/10W
R350	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R351	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R354	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R355	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R356	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R357	1-216-079-00	RES-CHIP	18K	5%	1/10W
R358	1-216-049-11	RES-CHIP	1K	5%	1/10W
R359	1-216-033-00	RES-CHIP	220	5%	1/10W
R360	1-216-033-00	RES-CHIP	220	5%	1/10W

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REF NO.	PART NO.	DESCRIPTION		REMARK	
R361	1-216-073-91	RES-CHIP	10K	5%	1/10W
R362	1-216-075-00	RES-CHIP	12K	5%	1/10W
R363	1-216-079-00	RES-CHIP	18K	5%	1/10W
R364	1-216-295-91	SHORT CHIP	0		
R365	1-216-033-00	RES-CHIP	220	5%	1/10W
R366	1-216-073-91	RES-CHIP	10K	5%	1/10W
R367	1-216-073-91	RES-CHIP	10K	5%	1/10W
R368	1-216-073-91	RES-CHIP	10K	5%	1/10W
R370	1-216-033-00	RES-CHIP	220	5%	1/10W
R371	1-216-083-00	RES-CHIP	27K	5%	1/10W
R372	1-216-091-00	RES-CHIP	56K	5%	1/10W
R376	1-216-081-00	RES-CHIP	22K	5%	1/10W
R377	1-216-121-11	RES-CHIP	1M	5%	1/10W
R378	1-216-041-00	RES-CHIP	470	5%	1/10W
R379	1-218-179-11	RES-CHIP	10M	5%	1/10W
R380	1-216-041-00	RES-CHIP	470	5%	1/10W
R383	1-216-049-11	RES-CHIP	1K	5%	1/10W
R384	1-216-295-91	SHORT CHIP	0		
R385	1-216-033-00	RES-CHIP	220	5%	1/10W
R391	1-216-049-11	RES-CHIP	1K	5%	1/10W
R500	1-249-417-11	CARBON	1K	5%	1/4W
R501	1-216-049-11	RES-CHIP	1K	5%	1/10W
R505	1-216-699-91	METAL CHIP	100K	0.5%	1/10W
R506	1-216-081-00	RES-CHIP	22K	5%	1/10W
R507	1-249-389-11	CARBON	4.7	5%	1/4W
R508	1-216-471-11	METAL OXIDE	27	5%	3W
R509	1-216-473-11	METAL OXIDE	56	5%	3W
R510	1-216-449-11	METAL OXIDE	56	5%	2W
R511	1-215-908-00	METAL OXIDE	33	5%	3W
R515	1-215-911-11	METAL OXIDE	100	5%	3W
R517	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R518	1-247-807-31	CARBON	100	5%	1/4W
R519	1-215-913-11	METAL OXIDE	220	5%	3W
R520	1-215-445-00	METAL	10K	1%	1/4W
R522	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R523	1-249-411-11	CARBON	330	5%	1/4W
R525	1-208-846-11	METAL CHIP	470K	0.5%	1/10W
R526	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W
R527	1-216-001-00	RES-CHIP	10	5%	1/10W
R528	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R529	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R531	1-247-843-11	CARBON	3.3K	5%	1/4W
R533	1-249-417-11	CARBON	1K	5%	1/4W
R534	1-216-364-11	METAL OXIDE	0.39	5%	2W
R535	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R536	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R537	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W
R539	1-216-049-11	RES-CHIP	1K	5%	1/10W
R540	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R541	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R542	1-216-073-91	RES-CHIP	10K	5%	1/10W
R543	1-216-437-00	METAL OXIDE	5.6K	5%	1W
R544	1-215-917-11	METAL OXIDE	1K	5%	3W
R545	1-216-077-91	RES-CHIP	15K	5%	1/10W
R546	1-216-077-91	RES-CHIP	15K	5%	1/10W
R547	1-216-085-91	RES-CHIP	33K	5%	1/10W
R548	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
R549	1-215-452-00	METAL	20K	1%	1/4W
R550	1-216-097-11	RES-CHIP	100K	5%	1/10W
R551	1-249-441-11	CARBON	100K	5%	1/4W

REF NO.	PART NO.	DESCRIPTION		REMARK	
R552	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R553	1-215-453-00	METAL	22K	1%	1/4W
R554	1-215-453-00	METAL	22K	1%	1/4W
R556	1-215-437-00	METAL	4.7K	1%	1/4W
R558	1-247-843-11	CARBON	3.3K	5%	1/4W
R559	1-249-429-11	CARBON	10K	5%	1/4W
R560	1-216-073-91	RES-CHIP	10K	5%	1/10W
R561	1-216-049-11	RES-CHIP	1K	5%	1/10W
R562	1-249-401-11	CARBON	47	5%	1/4W
R564	1-208-820-11	METAL CHIP	39K	0.5%	1/10W
R565	1-216-073-91	RES-CHIP	10K	5%	1/10W
R567	1-216-105-91	RES-CHIP	220K	5%	1/10W
R568	1-249-383-11	CARBON	1.5	5%	1/4W
R570	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R571	1-215-443-00	METAL	8.2K	1%	1/4W
R573	1-216-083-00	RES-CHIP	27K	5%	1/10W
R575	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
R577	1-215-913-11	METAL OXIDE	220	5%	3W
R578	1-216-369-00	METAL OXIDE	1	5%	2W
R579	1-216-295-91	SHORT CHIP	0		
R580	1-208-830-11	METAL CHIP	100K	0.5%	1/10W
R581	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R582	1-208-842-11	METAL CHIP	330K	0.5%	1/10W
R584	1-218-760-11	METAL CHIP	220K	0.5%	1/10W
R587	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R588	1-215-888-00	METAL OXIDE	220	5%	2W
R589	1-215-888-00	METAL OXIDE	220	5%	2W
R590	1-215-465-00	METAL	68K	1%	1/4W
R591	1-260-288-11	CARBON	0.47	5%	1/2W
R592	1-208-820-11	METAL CHIP	39K	0.5%	1/10W
R593	1-260-288-11	CARBON	0.47	5%	1/2W
R594	1-260-288-11	CARBON	0.47	5%	1/2W
R595	1-216-073-91	RES-CHIP	10K	5%	1/10W
R596	1-215-916-00	METAL OXIDE	680	5%	3W
R597	1-247-750-11	CARBON	680	5%	1/2W
R598	1-249-438-11	CARBON	56K	5%	1/4W
R599	1-249-389-11	CARBON	4.7	5%	1/4W
R600	1-249-438-11	CARBON	56K	5%	1/4W
R601	1-249-420-11	CARBON	1.8K	5%	1/4W
R602	1-249-389-11	CARBON	4.7	5%	1/4W
R603	1-215-485-00	METAL	470K	1%	1/4W
R604	1-216-097-11	RES-CHIP	100K	5%	1/10W
R607	1-249-425-11	CARBON	4.7K	5%	1/4W
R608	1-240-205-91	METAL	22M	5%	1/2W
R609	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R610	1-216-073-91	RES-CHIP	10K	5%	1/10W
R611	1-216-089-91	RES-CHIP	47K	5%	1/10W
R612	1-216-045-00	RES-CHIP	680	5%	1/10W
R614	1-216-041-00	RES-CHIP	470	5%	1/10W
R615	1-216-369-00	METAL OXIDE	1	5%	2W
R616	1-260-302-51	CARBON	6.8	5%	1/2W
R617	1-247-791-91	CARBON	22	5%	1/4W
R619	1-260-128-11	CARBON	270K	5%	1/2W
R620	1-129-719-00	FILM	0.027UF	5.00%	400V
R621	1-215-864-00	METAL OXIDE	150	5%	1W
R623	1-216-095-00	RES-CHIP	82K	5%	1/10W
R624	1-216-089-91	RES-CHIP	47K	5%	1/10W
R626	1-216-049-11	RES-CHIP	1K	5%	1/10W
R627	1-240-251-11	CEMENTED	6.8	5%	10W
R629	1-247-747-11	CARBON	470	5%	1/2W

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

A **B9**

REF NO.		PART NO.	DESCRIPTION			REMARK
R630		1-249-429-11	CARBON	10K	5%	1/4W
R631		1-216-089-91	RES-CHIP	47K	5%	1/10W
R632		1-220-886-11	FUSIBLE	0.1	10%	1W
R634	⚠	1-240-917-91-11	METAL	8.2M	5%	1W
R636		1-215-921-11	METAL OXIDE	4.7K	5%	3W
R639		1-216-361-21	METAL OXIDE	0.22	5%	2W
R640		1-249-415-11	CARBON	680	5%	1/4W
R641		1-216-361-21	METAL OXIDE	0.22	5%	2W
R642		1-249-419-11	CARBON	1.5K	5%	1/4W
R643		1-247-843-11	CARBON	3.3K	5%	1/4W
R644		1-249-419-11	CARBON	1.5K	5%	1/4W
R646		1-215-921-11	METAL OXIDE	4.7K	5%	3W
R647		1-249-387-11	CARBON	3.3	5%	1/4W
R648		1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R649		1-249-417-11	CARBON	1K	5%	1/4W
R650		1-215-882-00	METAL OXIDE	22	5%	2W
R652		1-215-900-11	METAL OXIDE	22K	5%	2W
R653		1-215-873-00	METAL OXIDE	4.7K	5%	1W
R656		1-249-417-11	CARBON	1K	5%	1/4W
R657		1-260-127-11	CARBON	220K	5%	1/2W
R659		1-216-049-11	RES-CHIP	1K	5%	1/10W
R660		1-216-073-91	RES-CHIP	10K	5%	1/10W
R661		1-215-873-00	METAL OXIDE	4.7K	5%	1W
R682		1-249-377-11	CARBON	0.47	5%	1/4W
R901		1-249-411-11	CARBON	330	5%	1/4W
R902		1-249-411-11	CARBON	330	5%	1/4W
R909		1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R910		1-216-065-91	RES-CHIP	4.7K	5%	1/10W
			<RELAY>			
RY600	⚠	1-755-299-11	RELAY, AC POWER			
RY601	⚠	1-755-299-11	RELAY, AC POWER			
			<SWITCH>			
S501		1-572-707-11	SWITCH, LEVER			
S502		1-572-707-11	SWITCH, LEVER			
			<TRANSFORMER>			
T501		1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE			
T503	⚠	1-453-284-11	TRANSFORMER ASSY FLY BACK (NX-4009/M314)			
T504		1-431-693-11	TRANSFORMER, HORIZONTAL LINEAR			
T505		1-426-981-11	TRANSFORMER, FERRITE (PMT)			
T601		1-424-505-11	TRANSFORMER, LINE FILTER			
T603	⚠	1-435-147-11	TRANSFORMER, CONVERTER (SRT)			
T604	⚠	1-431-852-11	TRANSFORMER, CONVERTER (SRT)			
			<THERMISTOR>			
TH600		1-803-586-11	THERMISTOR, NTC			
			<THERMISTOR>			
THP600		1-809-539-11	THERMISTOR, POSITIVE			

REF NO.	PART NO.	DESCRIPTION	REMARK
		<TUNER>	
TU101	8-598-593-20	TUNER, FSS BTF-WA421	
		<VARISTOR>	
VDR600	1-801-451-51	VARISTOR TNR14V271K660	
		<CRYSTAL>	
X001	1-579-125-11	VIBRATOR, CERAMIC	
X301	1-781-134-21	VIBRATOR, CRYSTAL	
X302	1-781-132-21	VIBRATOR, CRYSTAL	

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	*	A-1300-881-A	B9 BOARD COMPLETE			
			**********			
		1-533-223-11	CLIP, FUSE			
			<CAPACITOR>			
C7227		1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C7228		1-163-024-00	CERAMIC CHIP	0.018UF	10.00%	50V
C7229		1-163-018-00	CERAMIC CHIP	0.0056UF	10.00%	50V
C7230		1-163-024-00	CERAMIC CHIP	0.018UF	10.00%	50V
C7231		1-163-018-00	CERAMIC CHIP	0.0056UF	10.00%	50V
C7232		1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C7233		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C7234		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C7235		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C7236		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C7238		1-164-505-11	CERAMIC CHIP	2.2UF		16V
C7240		1-164-505-11	CERAMIC CHIP	2.2UF		16V
C7241		1-164-346-11	CERAMIC CHIP	1UF		16V
C7242		1-164-505-11	CERAMIC CHIP	2.2UF		16V
C7243		1-164-346-11	CERAMIC CHIP	1UF		16V
C7244		1-164-700-11	CERAMIC CHIP	0.68UF		16V
C7245		1-164-346-11	CERAMIC CHIP	1UF		16V
C7246		1-163-018-00	CERAMIC CHIP	0.0056UF	10.00%	50V
C7247		1-164-346-11	CERAMIC CHIP	1UF		16V
C7248		1-163-010-11	CERAMIC CHIP	0.0012UF	10.00%	50V
C7249		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C7250		1-164-346-11	CERAMIC CHIP	1UF		16V
C7251		1-163-017-00	CERAMIC CHIP	0.0047UF	10.00%	50V
C7252		1-164-346-11	CERAMIC CHIP	1UF		16V
C7253		1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C7254		1-126-965-91	ELECT	22UF	20.00%	50V
C7255		1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C7258		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C7259		1-126-933-11	ELECT	100UF	20.00%	16V
C7260		1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C7261		1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C7263		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C7301		1-126-933-11	ELECT	100UF	20.00%	16V
C7304		1-126-967-11	ELECT	47UF	20.00%	50V
C7305		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C7333		1-126-964-11	ELECT	10UF	20.00%	50V
C7401		1-164-346-11	CERAMIC CHIP	1UF		16V
C7402		1-164-346-11	CERAMIC CHIP	1UF		16V

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B9

REF NO.		PART NO.	DESCRIPTION			
C7403		1-163-005-91	CERAMIC CHIP	470PF	10.00%	50V
C7404		1-163-005-91	CERAMIC CHIP	470PF	10.00%	50V
C7405		1-126-935-11	ELECT	470UF	20.00%	16V
C7406		1-164-346-11	CERAMIC CHIP	1UF		16V
C7407		1-164-346-11	CERAMIC CHIP	1UF		16V
C7408		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C7409		1-126-933-11	ELECT	100UF	20.00%	16V
C7410		1-164-346-11	CERAMIC CHIP	1UF		16V
C7411		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C7412		1-164-346-11	CERAMIC CHIP	1UF		16V
C7413		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C7414		1-126-963-11	ELECT	4.7UF	20.00%	50V
C7415		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C7416		1-164-346-11	CERAMIC CHIP	1UF		16V
C7417		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C7418		1-164-346-11	CERAMIC CHIP	1UF		16V
C7419		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C7513		1-216-295-91	SHORT CHIP	0		
C7514		1-216-295-91	SHORT CHIP	0		
C7515		1-163-243-11	CERAMIC CHIP	47PF	5.00%	50V
C7517		1-164-005-11	CERAMIC CHIP	0.47UF		25V
C7518		1-126-963-11	ELECT	4.7UF	20.00%	50V
C7519		1-163-249-11	CERAMIC CHIP	82PF	5.00%	50V
C7520		1-163-249-11	CERAMIC CHIP	82PF	5.00%	50V
C7522		1-164-005-11	CERAMIC CHIP	0.47UF		25V
C7523		1-163-255-11	CERAMIC CHIP	150PF	5.00%	50V
C7524		1-163-247-91	CERAMIC CHIP	68PF	5.00%	50V
C7525		1-163-249-11	CERAMIC CHIP	82PF	5.00%	50V
C7526		1-163-249-11	CERAMIC CHIP	82PF	5.00%	50V
C7528		1-164-005-11	CERAMIC CHIP	0.47UF		25V
C7529		1-163-255-11	CERAMIC CHIP	150PF	5.00%	50V
C7530		1-163-247-91	CERAMIC CHIP	68PF	5.00%	50V
C7543		1-126-933-11	ELECT	100UF	20.00%	16V
C7544		1-165-319-11	CERAMIC CHIP	0.1UF		50V
C7554		1-165-319-11	CERAMIC CHIP	0.1UF		50V
C7557		1-165-319-11	CERAMIC CHIP	0.1UF		50V
C7558		1-126-947-11	ELECT	47UF	20.00%	16V
C7561		1-126-963-11	ELECT	4.7UF	20.00%	50V
C7601	⚠	1-104-708-51	MYLAR	0.47UF	20.00%	250V
C7602	⚠	1-109-835-51	MYLAR	0.68UF	20.00%	250V
C7654	⚠	1-117-703-51	CERAMIC	0.0047UF	99%	250V

<CONNECTOR>

CN7401	*	1-564-509-11	PLUG, CONNECTOR 6P
CN7402	*	1-764-333-11	PLUG, CONNECTOR 10P
CN7403	*	1-564-510-11	PLUG, CONNECTOR 7P
CN7501	*	1-564-511-11	PLUG, CONNECTOR 8P
CN7503	*	1-764-333-11	PLUG, CONNECTOR 10P
CN7601	*	1-580-843-11	PIN, CONNECTOR (POWER)
CN7602	*	1-580-843-11	PIN, CONNECTOR (POWER)
CN7603		1-695-915-11	TAB (CONTACT)

<DIODE>

D7300	8-719-158-35	RD9.1S-B
D7401	8-719-158-35	RD9.1S-B
D7402	8-719-158-35	RD9.1S-B
D7403	8-719-158-35	RD9.1S-B
D7404	8-719-158-35	RD9.1S-B
D7405	8-719-158-35	RD9.1S-B
D7406	8-719-158-35	RD9.1S-B
D7407	8-719-158-35	RD9.1S-B
D7408	8-719-158-35	RD9.1S-B
D7409	8-719-158-35	RD9.1S-B
D7410	8-719-158-35	RD9.1S-B
D7411	8-719-158-35	RD9.1S-B
D7412	8-719-914-42	DA204K
D7413	8-719-158-35	RD9.1S-B
D7501	8-719-158-35	RD9.1S-B

<FUSE>

F7601	⚠	1-576-334-11	FUSE, TIME-LAG 5A/250V

<IC>

IC7203	8-759-553-40	TDA7429S
IC7204	8-759-100-96	UPC4558G2
IC7501	8-759-009-07	MC14053BF

<JACK>

J7402	1-778-388-11	JACK BLOCK, PIN 9P

<CHIP CONDUCTOR>

JR7200	1-216-295-91	SHORT CHIP	0
JR7203	1-216-295-91	SHORT CHIP	0
JR7204	1-216-295-91	SHORT CHIP	0
JR7206	1-216-295-91	SHORT CHIP	0
JR7208	1-216-295-91	SHORT CHIP	0
JR7212	1-216-295-91	SHORT CHIP	0
JR7401	1-216-295-91	SHORT CHIP	0
JR7403	1-216-295-91	SHORT CHIP	0
JR7404	1-216-295-91	SHORT CHIP	0
JR7500	1-216-295-91	SHORT CHIP	0
JR7501	1-216-295-91	SHORT CHIP	0
JR7502	1-216-295-91	SHORT CHIP	0
JR7506	1-216-295-91	SHORT CHIP	0
JR7507	1-216-295-91	SHORT CHIP	0

<COIL>

L7204	1-414-856-11	INDUCTOR	10UH
L7301	1-414-189-31	INDUCTOR	100UH
L7501	1-414-856-11	INDUCTOR	10UH
L7506	1-414-857-11	INDUCTOR	100UH
L7507	1-414-187-11	INDUCTOR	47UH
L7508	1-414-187-11	INDUCTOR	47UH
L7509	1-414-857-11	INDUCTOR	100UH
L7510	1-414-187-11	INDUCTOR	47UH
L7511	1-414-187-11	INDUCTOR	47UH
L7512	1-414-856-11	INDUCTOR	10UH

<TRANSISTOR>

Q7309	8-729-010-25	MSD601-RT1
Q7310	8-729-010-25	MSD601-RT1
Q7401	8-729-424-67	UN2216
Q7402	8-729-424-67	UN2216
Q7403	8-729-216-22	2SA1162-G

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

B9

REF NO.	PART NO.	DESCRIPTION			REMARK
Q7404	8-729-216-22	2SA1162-G			
Q7501	8-729-010-25	MSD601-RT1			
Q7502	8-729-216-22	2SA1162-G			
Q7503	8-729-010-25	MSD601-RT1			
Q7505	8-729-010-25	MSD601-RT1			
Q7507	8-729-216-22	2SA1162-G			
Q7509	8-729-010-25	MSD601-RT1			
Q7510	8-729-010-25	MSD601-RT1			
Q7511	8-729-216-22	2SA1162-G			
Q7514	8-729-010-25	MSD601-RT1			
Q7515	8-729-010-25	MSD601-RT1			
Q7516	8-729-216-22	2SA1162-G			
Q7520	8-729-010-25	MSD601-RT1			
Q7522	8-729-010-25	MSD601-RT1			
Q7523	8-729-216-22	2SA1162-G			
		<RESISTOR>			
R7215	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R7216	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R7217	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R7218	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R7219	1-216-025-11	RES-CHIP	100	5%	1/10W
R7220	1-216-025-11	RES-CHIP	100	5%	1/10W
R7221	1-216-689-11	RES-CHIP	39K	5%	1/10W
R7222	1-216-689-11	RES-CHIP	39K	5%	1/10W
R7223	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R7224	1-216-073-91	RES-CHIP	10K	5%	1/10W
R7225	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R7226	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R7238	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R7239	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R7240	1-216-689-11	RES-CHIP	39K	5%	1/10W
R7241	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R7242	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R7243	1-216-689-11	RES-CHIP	39K	5%	1/10W
R7334	1-216-022-00	RES-CHIP	75	5%	1/10W
R7335	1-216-033-00	RES-CHIP	220	5%	1/10W
R7336	1-216-041-00	RES-CHIP	470	5%	1/10W
R7337	1-216-045-00	RES-CHIP	680	5%	1/10W
R7339	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R7341	1-216-045-00	RES-CHIP	680	5%	1/10W
R7342	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7343	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R7344	1-216-073-91	RES-CHIP	10K	5%	1/10W
R7401	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7402	1-216-073-91	RES-CHIP	10K	5%	1/10W
R7403	1-216-073-91	RES-CHIP	10K	5%	1/10W
R7404	1-216-073-91	RES-CHIP	10K	5%	1/10W
R7405	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7406	1-216-073-91	RES-CHIP	10K	5%	1/10W
R7407	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7408	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7409	1-216-041-00	RES-CHIP	470	5%	1/10W
R7410	1-216-113-00	RES-CHIP	470K	5%	1/10W
R7411	1-216-113-00	RES-CHIP	470K	5%	1/10W
R7412	1-216-041-00	RES-CHIP	470	5%	1/10W
R7413	1-216-021-00	RES-CHIP	68	5%	1/10W
R7414	1-216-113-00	RES-CHIP	470K	5%	1/10W
R7415	1-216-113-00	RES-CHIP	470K	5%	1/10W
R7416	1-216-089-91	RES-CHIP	47K	5%	1/10W

REF NO.	PART NO.	DESCRIPTION			REMARK
R7417	1-216-089-91	RES-CHIP	47K	5%	1/10W
R7418	1-216-113-00	RES-CHIP	470K	5%	1/10W
R7419	1-216-022-00	RES-CHIP	75	5%	1/10W
R7420	1-216-113-00	RES-CHIP	470K	5%	1/10W
R7421	1-216-077-91	RES-CHIP	15K	5%	1/10W
R7422	1-216-077-91	RES-CHIP	15K	5%	1/10W
R7423	1-216-113-00	RES-CHIP	470K	5%	1/10W
R7424	1-216-022-00	RES-CHIP	75	5%	1/10W
R7425	1-216-033-00	RES-CHIP	220	5%	1/10W
R7426	1-216-033-00	RES-CHIP	220	5%	1/10W
R7427	1-216-089-91	RES-CHIP	47K	5%	1/10W
R7428	1-216-113-00	RES-CHIP	470K	5%	1/10W
R7429	1-216-089-91	RES-CHIP	47K	5%	1/10W
R7430	1-216-113-00	RES-CHIP	470K	5%	1/10W
R7503	1-216-025-11	RES-CHIP	100	5%	1/10W
R7504	1-216-025-11	RES-CHIP	100	5%	1/10W
R7506	1-216-025-11	RES-CHIP	100	5%	1/10W
R7507	1-216-081-00	RES-CHIP	22K	5%	1/10W
R7508	1-216-073-91	RES-CHIP	10K	5%	1/10W
R7511	1-216-033-00	RES-CHIP	220	5%	1/10W
R7512	1-216-005-00	RES-CHIP	15	5%	1/10W
R7515	1-216-041-00	RES-CHIP	470	5%	1/10W
R7516	1-216-025-11	RES-CHIP	100	5%	1/10W
R7517	1-216-075-00	RES-CHIP	12K	5%	1/10W
R7520	1-216-079-00	RES-CHIP	18K	5%	1/10W
R7522	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7523	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7528	1-216-033-00	RES-CHIP	220	5%	1/10W
R7529	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R7531	1-216-045-00	RES-CHIP	680	5%	1/10W
R7537	1-216-041-00	RES-CHIP	470	5%	1/10W
R7538	1-216-041-00	RES-CHIP	470	5%	1/10W
R7540	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7541	1-216-041-00	RES-CHIP	470	5%	1/10W
R7542	1-216-041-00	RES-CHIP	470	5%	1/10W
R7543	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7545	1-216-041-00	RES-CHIP	470	5%	1/10W
R7547	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7548	1-216-025-11	RES-CHIP	100	5%	1/10W
R7549	1-216-075-00	RES-CHIP	12K	5%	1/10W
R7551	1-216-081-00	RES-CHIP	22K	5%	1/10W
R7552	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7553	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7554	1-216-033-00	RES-CHIP	220	5%	1/10W
R7556	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7559	1-216-041-00	RES-CHIP	470	5%	1/10W
R7560	1-216-041-00	RES-CHIP	470	5%	1/10W
R7561	1-216-041-00	RES-CHIP	470	5%	1/10W
R7562	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7563	1-216-041-00	RES-CHIP	470	5%	1/10W
R7566	1-216-041-00	RES-CHIP	470	5%	1/10W
R7567	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7568	1-216-041-00	RES-CHIP	470	5%	1/10W
R7569	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7582	1-216-295-91	SHORT CHIP	0		
R7601 ⚠	1-202-719-11	METAL	1M	5%	1/2W
		<TRANSFORMER>			
T7601	1-424-505-11	TRANSFORMER, LINE FILTER			
T7602	1-431-182-11	TRANSFORMER, LINE FILTER			

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

C6

REF NO.		PART NO.	DESCRIPTION		
**********					
	*	A-1332-152-A	C6 BOARD MOUNTED **********		
		4-382-854-11	SCREW (M3X10), P, SW (+)		
			<CAPACITOR>		
C701		1-115-350-51	CERAMIC	0.0047UF	2KV
C702		1-102-074-00	CERAMIC	0.001UF 10.00%	50V
C708		1-102-114-00	CERAMIC	470PF 10.00%	50V
C709		1-102-114-00	CERAMIC	470PF 10.00%	50V
C710		1-102-114-00	CERAMIC	470PF 10.00%	50V
C712		1-102-115-00	CERAMIC	560PF 10.00%	50V
C713		1-102-112-00	CERAMIC	330PF 10.00%	50V
C714		1-102-112-00	CERAMIC	330PF 10.00%	50V
C716		1-126-933-11	ELECT	100UF 20.00%	16V
C717		1-107-651-11	ELECT	4.7UF 20.00%	250V
C718		1-102-106-00	CERAMIC	100PF 10.00%	50V
C1800		1-126-964-11	ELECT	10UF 20.00%	50V
C1803		1-126-964-11	ELECT	10UF 20.00%	50V
C1804		1-126-964-11	ELECT	10UF 20.00%	50V
C1809		1-126-942-61	ELECT	1000UF 20.00%	25V
C1810		1-102-106-00	CERAMIC	100PF 10.00%	50V
			<CONNECTOR>		
CN700		1-695-915-11	TAB (CONTACT)		
CN702		1-695-915-11	TAB (CONTACT)		
CN703	*	1-564-509-11	PLUG, CONNECTOR 6P		
CN704		1-695-915-11	TAB (CONTACT)		
CN712		1-564-507-11	PLUG, CONNECTOR 4P		
CN1801	*	1-564-509-11	PLUG, CONNECTOR 6P		
CN1802	*	1-564-506-11	PLUG, CONNECTOR 3P		
			<DIODE>		
D701		8-719-911-19	1SS119-25		
D702		8-719-911-19	1SS119-25		
D703		8-719-911-19	1SS119-25		
D704		8-719-911-19	1SS119-25		
D705		8-719-911-19	1SS119-25		
D706		8-719-911-19	1SS119-25		
D707		8-719-911-19	1SS119-25		
D708		8-719-911-19	1SS119-25		
D709		8-719-911-19	1SS119-25		
D710		8-719-911-19	1SS119-25		
D711		8-719-911-19	1SS119-25		
D712		8-719-911-19	1SS119-25		
D716		8-719-911-19	1SS119-25		
D717		8-719-070-16	NNCD9.1A-T1		
D1803		8-719-911-19	1SS119-25		
D1804		8-719-911-19	1SS119-25		
D1808		8-719-908-03	GP08D		
			<IC>		
IC1800		8-759-822-38	LA6510		

REF NO.		PART NO.	DESCRIPTION			
			<JACK>			
J701	⚠	1-540-071-22	SOCKET, CRT			
			<COIL>			
L701		1-410-667-31	INDUCTOR	22UH		
L703		1-414-186-31	INDUCTOR	33UH		
L705		1-414-186-31	INDUCTOR	33UH		
L707		1-414-187-11	INDUCTOR	47UH		
			<TRANSISTOR>			
Q701		8-729-326-11	2SC2611			
Q702		8-729-326-11	2SC2611			
Q703		8-729-326-11	2SC2611			
Q704		8-729-326-11	2SC2611			
Q705		8-729-326-11	2SC2611			
Q706		8-729-326-11	2SC2611			
Q707		8-729-200-17	2SA1091-O			
Q708		8-729-200-17	2SA1091-O			
Q709		8-729-200-17	2SA1091-O			
Q710		8-729-119-78	2SC2785-HFE			
Q711		8-729-119-78	2SC2785-HFE			
Q712		8-729-119-78	2SC2785-HFE			
Q714		8-729-255-12	2SC2551-O			
Q1800		8-729-119-76	2SA1175-HFE			
Q1802		8-729-119-78	2SC2785-HFE			
			<RESISTOR>			
R701		1-219-752-11	METAL	100K	5%	1/2W
R705		1-216-392-11	METAL OXIDE	1.8	5%	3W
R710		1-215-923-00	METAL OXIDE	10K	5%	3W
R711		1-260-328-11	CARBON	1K	5%	1/2W
R712		1-215-923-00	METAL OXIDE	10K	5%	3W
R713		1-260-330-11	CARBON	1.5K	5%	1/2W
R714		1-215-923-00	METAL OXIDE	10K	5%	3W
R715		1-260-330-11	CARBON	1.5K	5%	1/2W
R716		1-249-405-11	CARBON	100	5%	1/4W
R717		1-249-405-11	CARBON	100	5%	1/4W
R718		1-249-405-11	CARBON	100	5%	1/4W
R719		1-215-469-00	METAL	100K	1%	1/4W
R720		1-249-923-11	CARBON	1K	5%	1/4W
R722		1-249-923-11	CARBON	1K	5%	1/4W
R723		1-215-469-00	METAL	100K	1%	1/4W
R724		1-249-923-11	CARBON	1K	5%	1/4W
R725		1-249-424-11	CARBON	3.9K	5%	1/4W
R726		1-249-424-11	CARBON	3.9K	5%	1/4W
R727		1-249-424-11	CARBON	3.9K	5%	1/4W
R728		1-249-408-11	CARBON	180	5%	1/4W
R729		1-249-408-11	CARBON	180	5%	1/4W
R730		1-249-408-11	CARBON	180	5%	1/4W
R731		1-249-401-11	CARBON	47	5%	1/4W
R732		1-249-401-11	CARBON	47	5%	1/4W
R733		1-249-401-11	CARBON	47	5%	1/4W
R734		1-219-743-11	METAL	100	5%	1/2W
R738		1-247-807-31	CARBON	100	5%	1/4W
R739		1-247-807-31	CARBON	100	5%	1/4W
R740		1-247-807-31	CARBON	100	5%	1/4W
R747		1-215-926-00	METAL OXIDE	33K	5%	3W
R749		1-215-927-00	METAL OXIDE	47K	5%	3W

C6 D3 H5

REF NO.	PART NO.	DESCRIPTION		REMARK	
R751	1-215-926-00	METAL OXIDE	33K	5%	3W
R753	1-249-429-11	CARBON	10K	5%	1/4W
R755	1-249-427-11	CARBON	6.8K	5%	1/4W
R756	1-249-427-11	CARBON	6.8K	5%	1/4W
R757	1-249-427-11	CARBON	6.8K	5%	1/4W
R758	1-249-419-11	CARBON	1.5K	5%	1/4W
R759	1-249-419-11	CARBON	1.5K	5%	1/4W
R760	1-249-419-11	CARBON	1.5K	5%	1/4W
R1800	1-249-417-11	CARBON	1K	5%	1/4W
R1801	1-249-426-11	CARBON	5.6K	5%	1/4W
R1802	1-249-382-11	CARBON	1.2	5%	1/4W
R1803	1-249-382-11	CARBON	1.2	5%	1/4W
R1805	1-249-429-11	CARBON	10K	5%	1/4W
R1806	1-249-425-11	CARBON	4.7K	5%	1/4W
R1808	1-249-425-11	CARBON	4.7K	5%	1/4W
R1809	1-249-435-11	CARBON	33K	5%	1/4W
R1810	1-249-435-11	CARBON	33K	5%	1/4W
R1811	1-249-433-11	CARBON	22K	5%	1/4W
R1812	1-249-435-11	CARBON	33K	5%	1/4W
R1821	1-249-433-11	CARBON	22K	5%	1/4W
R1822	1-249-435-11	CARBON	33K	5%	1/4W
R1823	1-249-426-11	CARBON	5.6K	5%	1/4W
R1824	1-249-435-11	CARBON	33K	5%	1/4W
R1825	1-247-843-11	CARBON	3.3K	5%	1/4W
		<VARIABLE RESISTOR>			
RV702	1-241-656-11	RES, ADJ, METAL FILM 110M			
RV1801	1-238-019-11	RES, ADJ, CARBON 47K			

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*	A-1400-167-A	D3 BOARD MOUNTED			
		**********			
		<CAPACITOR>			
C2800	1-126-947-11	ELECT	47UF	20.00%	25V
C2801	1-106-220-00	MYLAR	0.1UF	10.00%	100V
C2802	1-136-155-00	FILM	0.015UF	5.00%	50V
C2803	1-129-723-00	FILM	0.056UF	5.00%	630V
C2805	1-126-947-11	ELECT	47UF	20.00%	25V
C2806	1-106-383-00	MYLAR	0.047UF	5.00%	100V
C2807	1-137-194-81	FILM	0.47UF	5.00%	50V
C2808	1-126-964-11	ELECT	10UF	20.00%	50V
C2809	1-137-194-81	FILM	0.47UF	5.00%	50V
C2810	1-106-375-12	MYLAR	0.022UF	10.00%	250V
C2811	1-126-964-11	ELECT	10UF	20.00%	50V
C2812	1-126-964-11	ELECT	10UF	20.00%	50V
C2813	1-129-708-91	FILM	0.0033UF	5.00%	630V
		<CONNECTOR>			
CN2800	* 1-564-510-11	PLUG, CONNECTOR 7P			
CN2802	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN2803	1-695-915-11	TAB (CONTACT)			
		<DIODE>			
D2800	8-719-302-43	EL1Z			
D2801	8-719-911-19	1SS119-25			
D2802	8-719-911-19	1SS119-25			
D2803	8-719-911-19	1SS119-25			
		<IC>			
IC2800	8-759-701-59	NJM78M09FA			
IC2801	8-759-998-98	LM358D			
		<COIL>			
L2800	1-406-989-71	INDUCTOR	0UH		
L2802	1-406-987-21	INDUCTOR	4.7MH		
L2803	1-406-986-21	INDUCTOR	3.3UH		
L2804	1-406-678-11	INDUCTOR	15MH		
		<TRANSISTOR>			
Q2800	8-729-119-78	2SC2785-HFE			
Q2801	8-729-195-82	2SC2958			
Q2802	8-729-017-06	2SC4793			
Q2803	8-729-216-22	2SA1162-G			
Q2804	8-729-010-25	MSD601-RT1			
		<RESISTOR>			
R2800	1-249-405-11	CARBON	100	5%	1/4W
R2802	1-260-111-11	CARBON	10K	5%	1/2W
R2803	1-260-111-11	CARBON	10K	5%	1/2W
R2804	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R2805	1-216-097-11	RES-CHIP	100K	5%	1/10W
R2806	1-249-421-11	CARBON	2.2K	5%	1/4W
R2807	1-249-420-11	CARBON	1.8K	5%	1/4W
R2808	1-215-857-71	METAL OXIDE	10	5%	1W
R2809	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R2810	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2811	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R2812	1-216-081-00	RES-CHIP	22K	5%	1/10W
R2813	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R2814	1-216-121-11	RES-CHIP	1M	5%	1/10W
R2815	1-216-085-91	RES-CHIP	33K	5%	1/10W
R2816	1-216-107-00	RES-CHIP	270K	5%	1/10W
R2817	1-216-107-00	RES-CHIP	270K	5%	1/10W
		<TRANSFORMER>			
T2800	1-413-059-00	TRANSFORMER, FERRITE (DFT)			

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	A-1401-858-A	H5 BOARD MOUNTED			
		**********			
*	4-055-304-01	HOLDER, LED			
		<CAPACITOR>			
C3910	1-126-947-11	ELECT	47UF	20.00%	16V
C3911	1-126-947-11	ELECT	47UF	20.00%	16V
C3912	1-102-114-00	CERAMIC	470PF	10.00%	50V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

H5 J4 VM1

REF NO.		PART NO.	DESCRIPTION			REMARK
			<CONNECTOR>			
CN3601	*	1-580-844-11	PIN, CONNECTOR (POWER)			
CN3602	*	1-580-844-11	PIN, CONNECTOR (POWER)			
CN3901	*	1-564-507-11	PLUG, CONNECTOR 4P			
CN3902		1-564-509-11	PLUG, CONNECTOR 6P			
CN3904	*	1-564-512-11	PLUG, CONNECTOR 9P			
CN3905	*	1-564-512-11	PLUG, CONNECTOR 9P			
			<DIODE>			
D3905		8-719-070-16	NNCD9.1A-T1			
D3906		8-719-045-19	SPB-26MVWF			
D3908		8-719-070-16	NNCD9.1A-T1			
			<IC>			
IC3901		6-600-129-01	IC RPM7140-H5			
			<JACK>			
J3901		1-750-264-11	JACK			
J3903		1-770-329-13	JACK, PIN 3P			
			<TRANSISTOR>			
Q3901		8-729-030-02	DTC144ESA			
Q3902		8-729-030-02	DTC144ESA			
			<RESISTOR>			
R3907		1-249-426-11	CARBON	5.6K	5%	1/4W
R3908		1-249-413-11	CARBON	470	5%	1/4W
R3909		1-249-417-11	CARBON	1K	5%	1/4W
R3910		1-249-420-11	CARBON	1.8K	5%	1/4W
R3911		1-249-411-11	CARBON	330	5%	1/4W
R3912		1-247-843-11	CARBON	3.3K	5%	1/4W
R3913		1-249-429-11	CARBON	10K	5%	1/4W
R3914		1-249-411-11	CARBON	330	5%	1/4W
R3915		1-249-429-11	CARBON	10K	5%	1/4W
R3916		1-249-401-11	CARBON	47	5%	1/4W
R3920		1-247-807-31	CARBON	100	5%	1/4W
R3921		1-247-807-31	CARBON	100	5%	1/4W
			<SWITCH>			
S3601	⚠	1-571-433-31	SWITCH, PUSH (AC POWER)			
S3902		1-692-431-21	SWITCH, TACTILE			
S3903		1-692-431-21	SWITCH, TACTILE			
S3904		1-692-431-21	SWITCH, TACTILE			
S3905		1-692-431-21	SWITCH, TACTILE			
S3906		1-692-431-21	SWITCH, TACTILE			
S3907		1-692-431-21	SWITCH, TACTILE			
S3908		1-692-431-21	SWITCH, TACTILE			

REF NO.		PART NO.	DESCRIPTION			REMARK
**********						
	*	A-1388-338-A	J4 BOARD MOUNTED			
			**********			
			<CAPACITOR>			
C2410		1-126-967-11	ELECT	47UF	20.00%	50V
C2411		1-126-967-11	ELECT	47UF	20.00%	50V
C2412		1-126-967-11	ELECT	47UF	20.00%	50V
C2413		1-102-112-00	CERAMIC	330PF	10.00%	50V
C2414		1-102-112-00	CERAMIC	330PF	10.00%	50V
C2418		1-126-960-11	ELECT	1UF	20.00%	50V
C2419		1-126-960-11	ELECT	1UF	20.00%	50V
			<CONNECTOR>			
CN2410	*	1-564-523-11	PLUG, CONNECTOR 8P			
			<DIODE>			
D2410		8-719-929-15	HZS9.1NB2			
D2411		8-719-929-15	HZS9.1NB2			
D2412		8-719-929-15	HZS9.1NB2			
D2414		8-719-929-15	HZS9.1NB2			
D2415		8-719-929-15	HZS9.1NB2			
			<JACK>			
J2410		1-784-623-11	BLOCK, PIN JACK 5P			
			<RESISTOR>			
R2410		1-247-804-11	CARBON	75	5%	1/4W
R2411		1-247-804-11	CARBON	75	5%	1/4W
R2412		1-247-804-11	CARBON	75	5%	1/4W
R2414		1-247-887-00	CARBON	220K	5%	1/4W
R2415		1-249-431-11	CARBON	15K	5%	1/4W
R2417		1-247-887-00	CARBON	220K	5%	1/4W
R2418		1-249-431-11	CARBON	15K	5%	1/4W
R2419		1-249-409-11	CARBON	220	5%	1/4W
R2420		1-249-409-11	CARBON	220	5%	1/4W
R2421		1-249-409-11	CARBON	220	5%	1/4W
**********						
	*	A-1400-168-A	VM1 BOARD MOUNTED			
			**********			
		4-382-854-11	SCREW (M3X10), P, SW (+)			
			<CAPACITOR>			
C5902		1-104-661-91	ELECT	330UF	20.00%	16V
C5903		1-161-830-00	CERAMIC	0.0047UF		500V
C5905		1-126-935-11	ELECT	470UF	20.00%	10V
C5906		1-130-491-00	MYLAR	0.047UF	5.00%	50V
C5907		1-107-638-11	ELECT	33UF	20.00%	160V
C5908		1-106-383-00	MYLAR	0.047UF	10.00%	200V
C5909		1-126-933-11	ELECT	100UF	20.00%	16V
C5910		1-130-471-00	MYLAR	0.001UF	5.00%	50V
C5911		1-107-949-11	ELECT	2.2UF	20.00%	160V
C5912		1-104-999-11	MYLAR	0.1UF	10.00%	200V

VM1

REF NO.	PART NO.	DESCRIPTION			REMARK
C5913	1-130-471-00	MYLAR	0.001UF	5.00%	50V
C5914	1-126-933-11	ELECT	100UF	20.00%	16V
C5916	1-130-491-00	MYLAR	0.047UF	5.00%	50V
C5917	1-126-935-11	ELECT	470UF	20.00%	10V
C5918	1-115-341-51	CERAMIC	120PF	10.00%	500V
C5920	1-126-964-11	ELECT	10UF	20.00%	50V
C5921	1-102-852-91	CERAMIC	47PF	5.00%	50V
		<CONNECTOR>			
CN2801	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN5901	* 1-564-510-11	PLUG, CONNECTOR 7P			
CN5904	* 1-770-723-11	CONNECTOR, BOARD TO BOARD 8P			
		<DIODE>			
D5901	8-719-911-19	1SS119-25			
D5902	8-719-110-86	RD39ES-B			
D5903	8-719-911-19	1SS119-25			
D5904	8-719-110-86	RD39ES-B			
D5905	8-719-911-19	1SS119-25			
D5906	1-249-406-11	CARBON	120	5%	1/4W
D5907	1-249-406-11	CARBON	120	5%	1/4W
		<COIL>			
L5901	1-414-187-11	INDUCTOR	47UH		
L5902	1-414-856-11	INDUCTOR	10UH		
		<TRANSISTOR>			
Q5901	8-729-230-45	2SC2458-YGR			
Q5902	8-729-809-26	2SA1606-E			
Q5903	8-729-230-45	2SC2458-YGR			
Q5904	8-729-119-76	2SA1175-HFE			
Q5905	8-729-230-45	2SC2458-YGR			
Q5906	8-729-809-29	2SC4159-E			
Q5908	8-729-119-78	2SC2785-HFE			
Q5909	8-729-119-78	2SC2785-HFE			
		<RESISTOR>			
R5901	1-249-409-11	CARBON	220	5%	1/4W
R5902	1-249-414-11	CARBON	560	5%	1/4W
R5903	1-247-734-11	CARBON	39	5%	1/2W
R5904	1-249-411-11	CARBON	330	5%	1/4W
R5905	1-249-417-11	CARBON	1K	5%	1/4W
R5906	1-249-417-11	CARBON	1K	5%	1/4W
R5907	1-249-417-11	CARBON	1K	5%	1/4W
R5908	1-249-383-11	CARBON	1.5	5%	1/4W

REF NO.	PART NO.	DESCRIPTION			REMARK
R5909	1-249-409-11	CARBON	220	5%	1/4W
R5910	1-249-403-11	CARBON	68	5%	1/4W
R5911	1-249-439-11	CARBON	68K	5%	1/4W
R5912	1-249-437-11	CARBON	47K	5%	1/4W
R5914	1-249-403-11	CARBON	68	5%	1/4W
R5915	1-249-429-11	CARBON	10K	5%	1/4W
R5916	1-249-419-11	CARBON	1.5K	5%	1/4W
R5917	1-249-416-11	CARBON	820	5%	1/4W
R5918	1-249-429-11	CARBON	10K	5%	1/4W
R5919	1-249-417-11	CARBON	1K	5%	1/4W
R5920	1-249-439-11	CARBON	68K	5%	1/4W
R5921	1-216-476-11	METAL OXIDE	180	5%	3W
R5922	1-249-414-11	CARBON	560	5%	1/4W
R5923	1-249-383-11	CARBON	1.5	5%	1/4W
R5925	1-249-400-11	CARBON	39	5%	1/4W
R5929	1-215-880-00	METAL OXIDE	10	5%	2W
R5930	1-249-413-11	CARBON	470	5%	1/4W
R5931	1-249-413-11	CARBON	470	5%	1/4W
R5932	1-249-413-11	CARBON	470	5%	1/4W
R5933	1-249-413-11	CARBON	470	5%	1/4W
R5934	1-249-430-11	CARBON	12K	5%	1/4W
R5935	1-249-429-11	CARBON	10K	5%	1/4W

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<ACCESSORIES AND PACKING MATERIALS>
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	3-701-910-00	SCREW, SPECIAL (DIA. 3.8X20)
*	4-029-168-01	BAG, PROTECTION
*	4-054-319-01	TRAY
	4-065-210-01	JOINT
*	4-071-224-01	CUSHION (LOWER)(ASSY)
*	4-071-225-02	CUSHION (UPPER)(ASSY)
*	4-089-040-01	INDIVIDUAL CARTON
	4-091-294-11	MANUAL, INSTRUCTION
	4-392-003-11	BAND, HOLD
	4-392-004-11	CLIP

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<REMOTE COMMANDER>
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1-418-417-11	REMOTE COMMANDER (RM-915)
9-939-697-01	BATTERY COVER REMOTE COMMANDER

Sony Corporation
Sony Technology Malaysia Sdn. Bhd.
Visual Products

9-872-336-01

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